

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

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

IsoPlexis Corporation

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3826
(Primary Standard Industrial
Classification Code Number)

46-2179799
(I.R.S. Employer
Identification No.)

**35 NE Industrial Rd
Branford, CT 06405
(475) 221-8402**

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

Sean Mackay
Chief Executive Officer
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35 NE Industrial Rd
Branford, CT 06405
(475) 221-8402

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

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

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

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

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

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

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee
Common Stock, \$ 0.001 par value per share	\$ 100,000,000	\$ 10,910

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes offering price of any additional shares that the underwriters have the option to purchase.

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

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

PRELIMINARY PROSPECTUS (Subject to Completion, dated July 20, 2021)



Shares

COMMON STOCK

This is an initial public offering of shares of the common stock of IsoPlexis Corporation. We are offering _____ shares to be sold in this offering.

Prior to this offering, there has been no public market for our common stock. We estimate that the initial public offering price per share will be between \$ _____ and \$ _____. We have applied to list our common stock on The Nasdaq Global Market under the symbol "ISO."

We are an "emerging growth company" and "smaller reporting company" as defined under the federal securities laws and, under applicable Securities and Exchange Commission rules, we have elected to comply with certain reduced public company reporting and disclosure requirements.

Investing in our common stock involves risk. See "Risk Factors" beginning on page 13 to read about factors you should consider before buying shares of our common stock.

PRICE \$ _____ A SHARE

	Price to Public	Underwriting Discounts and Commissions ⁽¹⁾	Proceeds to IsoPlexis
Per Share	\$ _____	\$ _____	\$ _____
Total	\$ _____	\$ _____	\$ _____

(1) See "Underwriters" for a description of compensation to be paid to the underwriters.

We have granted the underwriters the option for a period of 30 days to purchase up to an additional _____ shares of our common stock from us at the initial public offering price less the underwriting discounts and commissions.

Neither the Securities and Exchange Commission nor any state securities commission or other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares on or about _____, 2021.

MORGAN STANLEY

COWEN

EVERCORE ISI

SVB LEERINK

Prospectus dated

, 2021.

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Through and including _____, 2021 (25 days after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Neither we nor any of the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information contained in this prospectus is current only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

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

MARKET, INDUSTRY AND OTHER DATA

This prospectus includes estimates regarding market and industry data. Unless otherwise indicated, information concerning our industry and the markets in which we operate, including our general expectations, market position, market opportunity and market size, are based on our management's knowledge and experience in the markets in which we operate, together with currently available information obtained from various sources, including publicly available information, industry reports and publications, surveys, our customers, trade and business organizations and other contacts in the markets in which we operate. Certain information is based on management estimates, which have been derived from third-party sources, as well as data from our internal research, and are based on certain assumptions that we believe to be reasonable.

In presenting this information, we have made certain assumptions that we believe to be reasonable based on such data and other similar sources and on our knowledge of, and our experience to date in, the markets in which we operate. Market and industry data, which is derived in part from management's estimates and beliefs, are subject to change and may be limited by the availability of raw data, the voluntary nature of the data gathering process and other limitations inherent in any statistical survey of such data. In addition, projections, assumptions and estimates of the future performance of the markets in which we operate and our future performance are necessarily subject to uncertainty and risk due to a variety of factors, including those described in "Risk Factors" and "Special Note Regarding Forward-Looking Statements." These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

TRADEMARKS AND TRADE NAMES

We own or have rights to certain trademarks that we use in conjunction with the operations of our business, including IsoPlexis, IsoLight, IsoSpark, IsoCode, CodePlex and IsoSpeak. Each trademark, trade name or service mark of any other company appearing or incorporated by reference in this prospectus belongs to its holder. Solely for convenience, trademarks and service marks referred to in this prospectus may appear with or without the “®” or “™” symbols, but the inclusion, or not, of such references are not intended to indicate, in any way, that we will not assert, to the fullest extent possible under applicable law, our rights to these trademarks and service marks. We do not intend our use or display of other companies’ trademarks, trade names or service marks to imply a relationship with, or endorsement or sponsorship of us by, such other companies.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider before deciding to invest in shares of our common stock. Before investing in shares of our common stock, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes thereto and the information set forth under the sections “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” in each case included in this prospectus. Unless the context otherwise requires, we use the terms “IsoPlexis,” the “Company,” the “Issuer,” “we,” “us” and “our” in this prospectus to refer to IsoPlexis Corporation and our consolidated subsidiary.

Overview

We are enabling deeper access to *in vivo* biology and driving durable and potentially transformational research on disease in a new era of advanced medicine. We believe our platform is the first to employ both proteomics, or the study of proteins and their functions, and single cell biology in an effort to fully characterize and link cellular function to patient outcomes by revealing treatment response and disease progression. Our single cell proteomics platform, which includes instruments, chip consumables and software, provides an end-to-end solution to reveal a more complete view of protein function at an individual cellular level. Since our commercial launch in June of 2018, our platform has been adopted by the top 15 global biopharmaceutical companies by revenue and nearly half of the comprehensive cancer centers in the United States to help develop more durable therapeutics, overcome therapeutic resistance, and predict patient responses for advanced immunotherapies, cell therapies, gene therapies, vaccines, and regenerative medicines. Our initial focus has been on developing applications of our platform for cancer immunology and cell and gene therapy. We are now expanding our capabilities to include applications for infectious diseases, inflammatory conditions, and neurological diseases.

We believe that traditional bulk methods of proteomics analysis, which analyze proteins in bulk samples made up of many different types of cells, lack quality single cell resolution. Single cell biology has become highly valuable to the life sciences industry because individual core cell types underlying a specific disease (for example, tumor cells, immune cells, and cells of the central nervous system) look and act very differently. Single cell biology provides deep insights into variations among each individual cell’s behavior, such as underlying disease activity and therapeutic response. Traditional bulk proteomic analyses fail to provide these insights as they focus on average cell activity in the aggregate. For example, in cell therapy, where heterogeneous populations of immune cells are engineered to combat tumors, traditional bulk proteomic methods are not designed to identify the unique immune cell subsets that contribute most significantly to effective treatment responses. At the same time, while the genome of single cells has been explored in depth, genomics has limitations on accurately predicting treatment resistance, which often results from tumor protein signaling adaptations rather than genetic aberrations. In oncology, while genomics has been used to reveal mutations that reside along druggable pathways, therapeutics targeting these pathways have only marginally improved patient outcomes often due to the rapid development of drug resistance. We believe that our platform can capture a more complete view of the functional biological drivers of disease and therapeutic response.

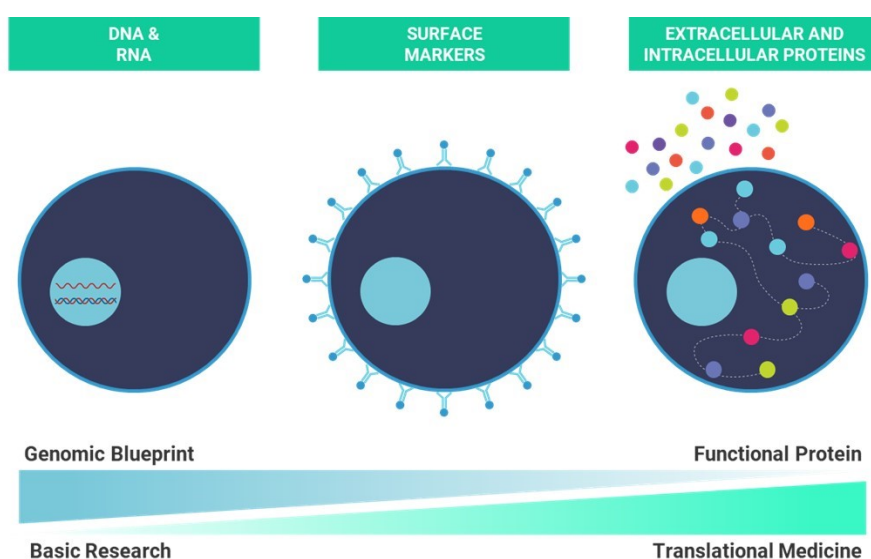
We designed our platform to reveal functional protein biology and cellular signaling networks at single cell resolution to accelerate the development of advanced medicines. The drivers of efficacy and toxicity are heavily impacted by cytokines, or extracellular functional proteins, through which certain individual cells send and receive signals. Additionally, disease progression and treatment resistance are heavily impacted by the intracellular signaling proteins, in particular phosphoproteins, which dictate the functional state of any cell. We believe that directly capturing the full range of intracellular and extracellular functional proteins is critical to analyzing the efficacy of therapies, identifying biomarkers suitable for druggable targets, and modifying therapeutics that are not generating the intended result. In contrast to traditional bulk methods of proteomics, which can only produce estimates of aggregated levels of functional proteins, our technology fills a critical knowledge gap by directly detecting the full range of intracellular and extracellular functional proteins within a sample.

As of March 31, 2021, we have placed 129 systems globally. Revenue for the fiscal years ended December 31, 2019 and 2020, was \$7.5 million and \$10.4 million, respectively, and revenue for the three months ended March 31,

2020 and 2021 was \$1.6 million and \$3.2 million, respectively. We generated net losses of \$13.6 million and \$23.3 million for the fiscal years ended December 31, 2019 and 2020, respectively, and of \$5.9 million and \$15.6 million for the three months ended March 31, 2020 and 2021, respectively. We market and sell our platform, which is currently marketed to customers as research use only, through a direct sales channel in North America and specific regions in Europe. Additionally, we utilize ten distributor relationships to market and sell our products in Europe, the Middle East and Asia-Pacific.

We intend to expand our market penetration in existing and new markets by, among other things, increasing awareness of the capabilities of our platform. As we execute our growth plan, we may face certain challenges related to scaling our operations, including potential difficulties related to growing our commercial team, expanding our facilities, incorporating new equipment and implementing new technology systems and laboratory processes in order to continue converting customers to our platform. We intend to continuously evaluate our capacity for growth.

Figure 1. The figure below represents the evolution of single cell biology from the study of the genomic blueprint of a cell—its DNA and RNA—through the functional representation of each cell’s activity—its extracellular and intracellular proteins. This evolution towards the proteome is enabling greater application to translational medicine.



Our Platform

Our platform is an end-to-end solution comprised of our proprietary IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software. Our IsoLight and IsoSpark instruments are designed to be fully-automated benchtop proteomic hubs. Our IsoCode chips utilize our core technology leveraging our proteomic barcoding to capture single cell protein information. Our recently introduced CodePlex chips leverage our core technology to assay multiplexed bulk proteins from very low volumes. Our IsoSpeak software interprets this data and is capable of rapidly returning comprehensive data figures in a format that would be suitable for inclusion in a research publication submission and also is capable of producing advanced visualizations to reveal key insights.

We believe that our platform overcomes many of the limitations of traditional bulk proteomic workflows, which can be capital intensive, time consuming and laborious, require multiple instruments and many manual steps, and may only be capable of analyzing small numbers of functional proteins at a time. Our platform supports multiple applications, including in cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases.

Figure 2. Our platform is comprised of instruments, chip consumables, and software.



IsoCode and CodePlex Chip Technology Overview

<i>Chip Solutions</i>	<i>Function</i>	<i>Applications</i>
Extracellular Protein Detection	Enables the discovery of better biomarkers, including rare cells that have the potential to drive therapeutic persistence, potency, and durability	Translational medicine <ul style="list-style-type: none"> • Cancer immunology • Inflammation • Cell therapies • Infectious disease • Targeted therapies
Intracellular Protein Detection	Measures cellular protein-to-protein interactions and adaptive resistance pathways to identify resistance earlier and enable earlier selection of potential treatments	Discovery <ul style="list-style-type: none"> • Combinatorial therapies • Kinase inhibitors • Targeted therapies • Cell therapies

Our Market Opportunity

Our current product offering supports a variety of applications that are broadly used for translational, preclinical and clinical development of advanced medicines, representing an initial \$12 billion addressable market opportunity based on management estimates. This cumulative market spend accounts for an installed base of approximately 55,000 instruments, in line with mature protein and cell biology technologies such as flow cytometry and multiplexed proteomics. Our relevant end users span the range of biopharmaceutical companies and academic and research institutions worldwide, which in the aggregate cover approximately 5,500 advanced medicines programs in both preclinical and clinical stages.

In addition to our currently targeted addressable market opportunity in advanced medicines, we have recently expanded our capabilities with our intracellular protein detection IsoCode chip products, which are designed to improve discovery biology as a bridge to the earlier development of advanced medicines. We believe this represents an incremental \$12 billion addressable market opportunity. Furthermore, our long term strategy is ultimately to add additional applications serving clinical diagnostics research that will allow us to serve additional markets we believe to be worth approximately \$10 billion. We expect that our initial entry into the clinical diagnostics market will start with our CodePlex solution for low volume bulk proteomics as it provides accessibility to end users through automation. We believe investments in these areas will provide access to a potential \$34 billion addressable market.

Our Competitive Advantages

We believe that our platform offers several advantages over existing proteomic and cellular analysis technologies, including:

- **Direct single cell analysis of functional proteins:** Our technology directly measures the functional proteins from each cell in a highly multiplexed manner.
- **Multiple proteomic applications on a single system:** Our technology provides highly multiplexed information from bulk and single cell extracellular proteome and the intracellular proteome, all on the same system.
- **Rapid data analysis and insights:** Our IsoSpeak software provides advanced, automated data analysis and accelerated insights that can save a significant amount of time for researchers and companies engaged in the development of advanced medicines.
- **Ultra-low sample volume requirements:** Our platform was designed to maximize the utility of the limited sample volume that our customers often obtain from their clinical trials.
- **Simplified workflow and minimal footprint:** Our automated benchtop instruments, with their minimal footprint and push button user interface, are designed to generate insights and comprehensive data figures within hours, with minimal technical expertise.

Our Growth Strategy

Our goal is to establish our platform as a leading proteomic workflow solution in the life sciences industry. In pursuit of that goal, the key elements of our growth strategy include:

- **Promoting our platform as the standard for single cell proteomic analysis:** We intend to continue promoting our platform as a critical tool that provides new and accessible layers of the functional extracellular and intracellular proteome at the single cell level.
- **Expand the installed base of our IsoLight and IsoSpark instruments with new and existing customers:** Utilizing our multi-channel sales and distribution network, we intend to continue engaging with the global life sciences community to grow our installed base and expand the number of instruments within organizations that are already utilizing our technology to advance their research and therapeutic development.
- **Drive adoption of our existing applications:** We intend to continue promoting our platform to help meet the urgent need to develop new therapeutics and accelerate development timelines across multiple applications spanning cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases.
- **Develop new applications across multiple therapeutic classes and indications:** As we continue to deploy our platform, we intend to concurrently expand the breadth of applications for our technologies as new areas of therapeutic development emerge.
- **Expand adoption of our platform into new geographical markets:** We currently market and sell our technology with an in-house commercial team in the United States and Europe, and utilize a distribution network to market and sell across multiple countries, which we intend to continue to expand.
- **Integrate sequencing biology with proteomics:** We intend to further develop our product roadmap to integrate sequencing and functional proteomic biology from single cells to enable novel applications in discovery biology.

Recent Developments

Patent Acquisition

On May 12, 2021, we entered into a Patent Purchase Agreement (the “Patent Purchase Agreement”) with QIAGEN Sciences, LLC and QIAGEN GmbH (the “Sellers”) to purchase a collection of 86 patents related to DNA and RNA sequencing for an aggregate purchase price of \$20.0 million. We closed the acquisition on May 15, 2021, and funded the \$20.0 million purchase price with cash on hand. We believe that the acquired patents will enable integration of our existing proprietary proteomics technologies with new proprietary sequencing-based technologies. For more information about the purchased patents, see “Business—Intellectual Property.” In connection with entering into the Patent Purchase Agreement, we also entered into an Assumption Agreement with the Sellers to assume the Sellers’ rights and obligations under a covenant not to sue with a separate third party related to certain patents purchased pursuant to the Patent Purchase Agreement. In addition, in connection with entering into the Patent Purchase Agreement, we entered into a Supply Agreement with one of the Sellers pursuant to which they have agreed to supply certain reagents to us.

Amendment to Credit Agreement

On May 27, 2021, we entered into an amendment (the “First Amendment”) to the credit agreement and guaranty, dated as of December 30, 2020 (as amended by the First Amendment, the “Credit Agreement”), between the Company and Perceptive Credit Holdings III, LP, as administrative agent and as a lender (the “Administrative Agent”), to, among other things, split the previously remaining \$25.0 million delayed draw term loan commitments under the Credit Agreement into a \$10.0 million Tranche B term loan, available to be drawn upon the effectiveness of the First Amendment, and a \$15.0 million Tranche C term loan, available to be drawn subject to achievement of a revenue milestone set forth in the Credit Agreement. The full amount of the Tranche B term loan was drawn on May 27, 2021. We intend to use the proceeds from the Tranche B term loan for general corporate purposes. See “Description of Certain Indebtedness—Secured Term Loan Facility.”

Preliminary Financial Results for the Second Quarter Ended June 30, 2021

We are currently finalizing our financial quarterly closing process for the three months ended June 30, 2021. While complete financial information and operating data are not yet available, set forth below are certain preliminary estimates of the results of operations that we expect to report for our second quarter of 2021. However, our actual results may differ materially from these estimates due to the completion of our financial closing procedures, final adjustments and other developments that may arise between now and the time the financial results for the three months ended June 30, 2021 are finalized. The estimates below represent the most current information available to management and do not present all necessary information indicative of our results of operations and financial condition for the quarter ended June 30, 2021. We have provided a range for the preliminary results described below primarily because our financial closing procedures for the quarter ended June 30, 2021 are not yet complete. As a result, there is a possibility that our final results will vary from these preliminary estimates. We currently expect that our final results will be within the ranges described below. It is possible, however, that our final results will not be within the ranges we currently estimate. The estimates for the three months ended June 30, 2021 are not necessarily indicative of any future period and should be read together with “Risk Factors,” “Special Note Regarding Forward-Looking Statements,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our financial statements and related notes included elsewhere in this prospectus.

The preliminary estimates for the three months ended June 30, 2021 presented below have been prepared by, and are the responsibility of, management. Deloitte & Touche LLP, our independent registered public accounting firm, has not audited, reviewed, compiled or performed any procedures with respect to such preliminary data. Accordingly, Deloitte & Touche LLP does not express an opinion or any other form of assurance with respect thereto.

The following are our preliminary estimates for the three months ended June 30, 2021:

- Total revenue is expected to be between \$4.0 million and \$4.2 million, representing growth of 90% to 100% compared to \$2.1 million in the corresponding prior-year period and representing growth of 25% to 31% compared to \$3.2 million in the three months ended March 31, 2021.
- Instruments revenue is expected to be between \$2.6 million and \$2.8 million, representing growth of 68% to 81% over the corresponding prior-year period and representing growth of 24% to 33% compared to \$2.1 million in the three months ended March 31, 2021.
- Consumable revenue is expected to be between \$1.0 million and \$1.2 million, representing growth of 400% to 500% over the corresponding prior-year period and representing growth of 25% to 50% compared to \$0.8 million in the three months ended March 31, 2021.
- Instrument unit sales of 21 units, representing growth of 75% over the corresponding prior-year period and representing growth of 17% compared to 18 units sold in the three months ended March 31, 2021.
- Loss from operations is expected to be between \$17.8 million and \$18.8 million, an increase of 242% to 262% compared to \$5.2 million in the corresponding prior-year period.
- Cash is expected to be \$68.9 million as of the end of the period.
- We had \$35.0 million of borrowings outstanding under the Credit Agreement, excluding debt discounts, as of the end of the period.

In connection with our quarterly closing procedures, we are in the process of assessing the fair value of our common stock as of June 30, 2021. We intend to record an appropriate charge for non-cash stock-based compensation expense in our statement of operations for the three months ended June 30, 2021. While we believe the estimated range of loss from operations presented above already accounts for any applicable charge for non-cash stock-based compensation expense, our final loss from operations for the three months ended June 30, 2021 may change as a result of our fair value determination of our common stock as of June 30, 2021.

We expect our closing procedures with respect to the three months ended June 30, 2021 to be completed in mid- to late-August 2021. Accordingly, our financial statements as of and for the three months ended June 30, 2021 will not be available until after this offering is completed.

Summary of Risk Factors

Our business is subject to a number of risks, including risks that may prevent us from achieving our business objectives or may adversely affect our business, financial condition, results of operations and prospects, which could cause the trading price of our common stock to decline and could result in a partial or total loss of your investment. You should consider these risks before making a decision to invest in shares of our common stock. These risks are discussed more fully in “Risk Factors” beginning on page 13 in this prospectus. The following is a summary of some of the principal risks we face:

- we have incurred significant net losses since inception, we expect to incur net losses in the future, and we may not be able to generate sufficient revenue to achieve and maintain profitability;
- it may be difficult for us to implement our strategies for executing our growth plan or to sustain or successfully manage our anticipated growth. Specifically, we may face difficulties related to scaling our operations, converting customers to our platform and incorporating new equipment and new technology systems and laboratory processes in response to our growth;
- we have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance;

- the life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operations will suffer;
- the sizes of the markets and forecasts of market growth for our platform are based on a number of complex assumptions and estimates, and may be inaccurate;
- our business, financial condition, results of operations and prospects may be harmed if our customers discontinue or spend less on research, development and production and other scientific endeavors;
- if we do not successfully manage the development and launch of new products, our operating results could be adversely affected;
- we depend on our key personnel and other highly qualified personnel, and if we are unable to recruit, train and retain our personnel, we may not achieve our goals;
- we depend on our information technology systems, and any failure of these systems could harm our business;
- due to the significant resources required to enable access in new markets, we must make strategic and operational decisions to prioritize certain markets or technology offerings. We may expend our resources to access markets or develop technologies that do not yield meaningful revenue or we may fail to capitalize on markets or technologies that may be more profitable or with a greater potential for success;
- our international business could expose us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States;
- our manufacturing operations are dependent upon third party suppliers, including single source suppliers, making us vulnerable to supply shortages and price fluctuations, which could harm our business;
- if our facilities are damaged or become inoperable, we will be unable to continue to research, develop and manufacture our products and, as a result, our business, financial condition, results of operations and prospects may be adversely affected until we are able to secure a new facility;
- if we are unable to obtain and maintain sufficient intellectual property protection for our products and technologies, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired; and
- we have identified a material weakness in our internal control over financial reporting, and the failure to remediate this material weakness may adversely affect our business, investor confidence in our company, our financial results and the market value of our common stock.

Implications of Being an Emerging Growth Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the “JOBS Act”). An emerging growth company may take advantage of specified exemptions from various requirements that are otherwise applicable generally to public companies in the United States. These provisions include:

- presenting only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus;
- reduced disclosure about our executive compensation arrangements;
- an exemption from the requirements to hold non-binding advisory votes on executive compensation and golden parachute payments;

- an exemption from the auditor attestation requirement in the assessment of the emerging growth company's internal control over financial reporting; and
- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements.

We will remain an emerging growth company until the earliest to occur of:

- the last day of the fiscal year in which we have annual gross revenues of \$1.07 billion or more;
- the date on which we have issued more than \$1.0 billion in non-convertible debt in the previous three years;
- the last day of the fiscal year in which we are deemed to be a "large accelerated filer" under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which would occur if the market value of our common stock that is held by non-affiliates is \$700.0 million or more as of the last business day of the second fiscal quarter of such year; and
- the last day of the fiscal year ending after the fifth anniversary of this offering.

We have elected to take advantage of certain of the reduced disclosure obligations in this prospectus and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our investors may be different from the information you might receive from other public reporting companies that are not emerging growth companies in which you hold equity interests.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, while we are an emerging growth company, we will not be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies.

To the extent that we continue to qualify as a "smaller reporting company," as such term is defined in Rule 12b-2 under the Exchange Act, after we cease to qualify as an emerging growth company, we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the Securities and Exchange Commission ("SEC").

Corporate Information

IsoPlexis Corporation was incorporated in Delaware on March 1, 2013. Our principal executive office is located at 35 NE Industrial Rd., Branford, CT 06405 and our telephone number is (475) 221-8402. Our website address is www.isoplexis.com. The information contained on, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus, and you should not rely on any such information in making the decision whether to purchase shares of our common stock.

THE OFFERING

Common stock offered by us	shares (or shares if the underwriters exercise in full their option to purchase additional shares from us).
Underwriters' option to purchase additional shares of common stock from us	shares.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise in full their option to purchase additional shares from us).
Use of proceeds	<p>We estimate that the net proceeds to us from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise in full their option to purchase additional shares from us) based on an assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.</p> <p>We intend to use the net proceeds from this offering for general corporate purposes, including working capital, research and development, sales and marketing activities, general administrative matters, operating expenses and capital expenditures. See "Use of Proceeds."</p>
Risk factors	You should read the "Risk Factors" section beginning on page 13 and the other information included in this prospectus for a discussion of the factors to consider before deciding to invest in shares of our common stock.
Proposed listing and symbol	We have applied to list our common stock on The Nasdaq Global Market ("Nasdaq") under the trading symbol "ISO."

The number of shares of our common stock that will be outstanding after this offering is based on shares of common stock outstanding as of , which gives effect to the Assumed Share Events (as defined below) and excludes:

- shares of our common stock issuable upon the exercise of the warrant (the "Series D Preferred Stock Warrant") held by Perceptive Credit Holdings III, LP to purchase Series D redeemable convertible preferred stock as of that will become a warrant to purchase shares of common stock at an exercise price of \$ per share upon the closing of this offering;
- shares of our common stock issuable upon exercise of options to purchase shares of our common stock outstanding as of with a weighted-average exercise price of \$ per share; and
- shares of our common stock reserved for future issuance under our 2014 Plan (as defined below) as of .

In addition, unless otherwise indicated, all information in this prospectus assumes and reflects (collectively, the "Assumed Share Events"):

- a one-for- stock split (the "Stock Split") of our common stock to be effected prior to the closing of this offering;
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, each of which will be in effect at the closing of this offering;

- the automatic conversion of all of our outstanding redeemable convertible preferred stock, of which shares were outstanding as of , into shares of our common stock concurrently with the closing of this offering, as if such conversion had occurred on (the “Preferred Stock Conversion”);
- the exercise of the warrant (the “Series A-2 Preferred Stock Warrant”) held by Connecticut Innovations, Incorporated into 3,178 shares of Series A-2 redeemable convertible preferred stock on May 11, 2021, at an exercise price of \$12.58608 per share (the “Series A-2 Warrant Exercise”);
- no exercise of outstanding options or the Series D Preferred Stock Warrant subsequent to ; and
- no exercise by the underwriters of their option to purchase up to an additional shares of our common stock.

For more information about our warrants, see “Description of Capital Stock—Warrants.”

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth a summary of our consolidated financial data for the periods and as of the dates indicated. The summary consolidated financial data for each of the two years ended December 31, 2019 and December 31, 2020, are derived from our audited consolidated financial statements and the accompanying notes that are included elsewhere in this prospectus. The summary consolidated financial data as of March 31, 2021, and for each of the three month periods ended March 31, 2020 and 2021, are derived from our unaudited consolidated interim financial statements and the accompanying notes that are included elsewhere in this prospectus. Our unaudited consolidated interim financial statements were prepared in accordance with generally accepted accounting principles in the United States, or GAAP, on the same basis as our audited consolidated financial statements and include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for the fair presentation of the financial information set forth in those financial statements.

The historical results presented below are not necessarily indicative of financial results to be achieved in future periods and our results for the three months ended March 31, 2021 are not necessarily indicative of results expected for the year ending December 31, 2021. The summary consolidated financial data should be read together with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this prospectus.

Consolidated Statements of Operations Data:

	Year Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
	(audited)		(unaudited)	
	(in thousands, except share and per share amounts)			
Revenue				
Product revenue	\$ 5,328	\$ 9,318	\$ 1,338	\$ 2,927
Service revenue	2,177	1,069	276	307
Total revenue	7,505	10,387	1,614	3,234
Cost of product revenue	2,803	4,866	761	1,549
Cost of service revenue	455	108	33	25
Gross Profit	4,247	5,413	820	1,660
Operating expenses:				
Research and development expenses ⁽¹⁾	10,134	11,157	3,138	3,674
General and administrative expenses ⁽¹⁾	4,806	8,023	1,790	4,378
Sales and marketing expenses ⁽¹⁾	7,559	13,511	2,275	7,074
Total operating expenses	22,499	32,691	7,203	15,126
Loss from operations	(18,252)	(27,278)	(6,383)	(13,466)
Other income and (expense):				
Grant income	4,226	4,117	550	596
Research and development tax credits	411	—	—	—
Change in fair value of warrants	(10)	(85)	(21)	(1,946)
Interest income	—	3	—	6
Interest expense	(1)	(21)	—	(749)
Net loss	\$ (13,626)	\$ (23,264)	\$ (5,854)	\$ (15,559)
Accrued dividends on redeemable convertible preferred stock	(1,486)	(1,979)	(1,468)	(3,276)
Net loss attributable to common stockholders	\$ (15,112)	\$ (25,243)	\$ (7,322)	\$ (18,835)
Basic and diluted net loss per common share ⁽²⁾	\$ (58.62)	\$ (96.61)	\$ (28.11)	\$ (70.49)
Weighted-average common shares outstanding—basic and diluted ⁽²⁾	257,780	261,299	260,446	267,203

(1) Costs and expenses include stock-based compensation as follows:

	Year Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
	(audited)		(unaudited)	
	(in thousands)			
Research and development	\$ 25	\$ 35	\$ 8	\$ 19
General and administrative	107	455	37	47
Sales and marketing	11	27	4	29
Total stock-based compensation expense	\$ 143	\$ 517	\$ 49	\$ 95

(2) See Note 2 and Note 15 to our consolidated financial statements included elsewhere in this prospectus for further details on the calculation of basic and diluted net loss per share attributable to common stockholders and the weighted-average amount of shares outstanding used to compute net loss per share attributable to common stockholders.

Consolidated Balance Sheet Data (at Period End):

	As of March 31, 2021		
	Actual	Pro Forma ⁽¹⁾	Pro Forma as Adjusted ⁽²⁾⁽³⁾
	(audited)	(unaudited)	(unaudited)
	(in thousands)		
Cash	\$ 101,400	\$ 101,400	\$
Working capital ⁽⁴⁾	107,312	107,312	
Total assets	123,146	123,146	
Total liabilities ⁽⁵⁾	36,396	36,189	
Total redeemable convertible preferred stock	153,460	—	
Accumulated deficit	(67,693)	(67,693)	
Total stockholders' (deficit) equity	(66,710)	86,957	

- (1) The pro forma column in the balance sheet data gives effect to (i) the Preferred Stock Conversion, (ii) the Series A-2 Warrant Exercise and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will be in effect at the closing of this offering.
- (2) The pro forma as adjusted column in the balance sheet data table above gives effect to (i) the pro forma adjustments set out above and (ii) the issuance and sale by us of shares of common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and our receipt of the estimated net proceeds from that sale after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) A \$1.00 increase or decrease in the assumed initial public offering price of our common stock of \$ per share would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, working capital, total assets and total stockholders' equity by approximately \$, assuming that the number of shares offered, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase or decrease of 1,000,000 shares in the number of shares of common stock offered by us in this offering, as set forth on the cover page of this prospectus, would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, working capital, total assets and total stockholders' equity by approximately \$, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (4) We define working capital as current assets less current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.
- (5) Does not include our borrowing of the \$10.0 million Tranche B term loan under the Credit Agreement on May 27, 2021.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider and read carefully all of the risks and uncertainties described below, as well as other information included in this prospectus, including our consolidated financial statements and related notes appearing at the end of this prospectus, before making an investment decision. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition, results of operations and prospects. If any of these risks actually occur, the trading price of our common stock could decline, and you may lose all or part of your original investment. This prospectus also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of specific factors, including the risks and uncertainties described below.

Risks Related to Our Business and Industry

We have incurred significant net losses since inception, we expect to incur net losses in the future, and we may not be able to generate sufficient revenue to achieve and maintain profitability.

We have incurred significant net losses since our inception. For the years ended December 31, 2019 and 2020, we incurred net losses of \$13.6 million and \$23.3 million, respectively, and for the three months ended March 31, 2020 and 2021, we incurred net losses of \$5.9 million and \$15.6 million, respectively. As of December 31, 2020, we had an accumulated deficit of \$52.4 million and as of March 31, 2021, we had an accumulated deficit of \$68.0 million. We expect that our operating expenses will continue to increase as we develop, enhance and commercialize new products and incur additional operational costs associated with being a public company. Since our inception, we have financed our operations primarily from private placements of our redeemable convertible preferred stock, the incurrence of indebtedness and, to a lesser extent, grant income and revenue derived from sales of our instruments and chip consumables. We have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, conducting development activities, including development and commercialization of our IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software and research and development activities related to advancing and expanding our scientific and technological capabilities, and filing patent applications. We will need to generate significant additional revenue to achieve and sustain profitability, and even if we achieve profitability, we cannot be sure that we will remain profitable for any substantial period of time. We may never be able to generate sufficient revenue to achieve or sustain profitability and our recent and historical growth should not be considered indicative of our future performance. If we do not achieve or sustain profitability, it will be more difficult for us to finance our business and accomplish our strategic objectives, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects and cause the market price of our common stock to decline.

It may be difficult for us to implement our strategies for executing our growth plan or to sustain or successfully manage our anticipated growth.

Our success will depend on our ability to grow market penetration in existing markets and our ability to identify new applications for our platform to capture a greater share of the research spend accelerating advanced medicines and additional markets in the future. Our ability to grow our market penetration in existing markets will depend on our ability to attract new customers by increasing awareness of the capabilities of our platform. Future revenue growth will also depend on our ability to:

- properly identify and anticipate the needs of our customers in existing and new markets, including expanding our capabilities to include new applications for infectious diseases, inflammatory conditions and neurological diseases;
- develop and introduce new products;
- avoid infringing upon the intellectual property rights of third-parties and maintain necessary intellectual property licenses from third-parties; and

- provide adequate training to potential users of our products.

If we are unable to drive new customer conversion to our platform, expand adoption of the IsoLight or IsoSpark and our related products in new industries and markets, or increase the usage and value of our workflows to our customers, then our business, financial condition, results of operations and prospects could be adversely affected.

Additionally, as we continue to scale our business and the number of customers accessing our platform grows and our volume of installed platforms increases, we may find that certain of our products, certain customers or certain markets may require a dedicated sales force or sales personnel with different experience than those we currently employ. We may need to increase our capacity for customer service and support, for billing and general process improvements, and expand our internal quality assurance programs. Identifying, recruiting and training additional qualified personnel would require significant time, expense and attention. We may also need to purchase additional equipment, some of which can take several months or more to procure, setup and validate, and increase our personnel levels to meet increased demand. There is no assurance that any of these increases in scale, expansion of personnel, equipment, software and computing capacities or process enhancements will be successfully implemented, or that we will have adequate space, including in our manufacturing facilities, to accommodate such required expansion.

As we commercialize additional products, we will need to incorporate new equipment, implement new technology systems and laboratory processes, and hire new personnel, possibly with supplemental or different qualifications as compared to our current personnel. Failure to manage this growth or transition could result in turnaround time delays, higher product costs, declining product quality, deteriorating customer service and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our products and could damage our reputation and the prospects for our business.

We have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance.

We completed our first sale of our instruments in June 2018 and have experienced significant revenue growth in recent periods. Revenue increased by 38% to \$10.4 million for the year ended December 31, 2020 as compared to \$7.5 million for the year ended December 31, 2019, and by 100% to \$3.2 million for the three months ended March 31, 2021 as compared to \$1.6 million for the three months ended March 31, 2020. In addition, we operate in highly competitive markets characterized by rapid technological advances and we expect that our business will have to evolve over time to remain competitive. Our limited operating history, evolving business and rapid growth may make it difficult to evaluate our future prospects and the risks and challenges we may encounter and may increase the risk that we will not continue to grow at or near historical rates.

If we fail to address the risks and difficulties that we face, including those described elsewhere in this “Risk Factors” section, our business, financial condition, results of operations and prospects could be adversely affected. We have encountered in the past, and expect to encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in new and rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks and difficulties successfully, our results of operations could differ materially from our expectations and our business, financial condition, results of operations and prospects could be adversely affected.

The life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operations will suffer.

We face significant competition in the life sciences technology market. We currently compete with many established technology companies in the flow cytometry, cellular analysis and single cell -omics businesses. This includes companies that design, manufacture and market systems, consumables and software for, among other applications, genomics, transcriptomics, proteomics, metabolomics, single cell analysis and immunology, and/or provide services related to the same. These companies include Becton, Dickinson and Company, Thermo Fisher Scientific Inc. and Bio-Rad Laboratories, Inc., each of which has products that compete to varying degrees with some but not all of our products.

Some of our current competitors are large publicly-traded companies, or are divisions of large publicly-traded companies, and may enjoy a number of competitive advantages over us, including:

- greater name and brand recognition;
- greater financial and human resources;
- broader product lines;
- larger sales forces and more established distributor networks;
- substantial intellectual property portfolios;
- larger and more established customer bases and relationships; and
- better established, larger scale and lower cost manufacturing capabilities.

As a result, our competitors and potential competitors may be able to respond more quickly to changes in customer requirements, devote greater resources to the development, promotion and sale of their platforms or instruments than we can or sell their platforms or instruments, or offer services competitive with our platform and services, at prices designed to win significant levels of market share. We may not be able to compete effectively against these organizations.

In addition, competitors may be acquired by, receive investments from or enter into other commercial relationships with larger, well-established and well-financed companies. Certain of our competitors may be able to secure key inputs from vendors on more favorable terms, devote greater resources to marketing and promotional campaigns, adopt more aggressive pricing policies and devote substantially more resources to product development than we can. If we are unable to compete successfully against current and future competitors, we may be unable to increase market adoption and sales of our platform, which could prevent us from increasing our revenue or achieving profitability.

The sizes of the markets and forecasts of market growth for our platform are based on a number of complex assumptions and estimates, and may be inaccurate.

The market for our platform is evolving, making it difficult to predict with any accuracy the size of the markets for our current and future products. We use estimates and forecasts to calculate annual total addressable markets and market growth for our platform and for our technologies under development. These estimates and forecasts are based on a number of complex assumptions, internal and third party estimates and other business data, including assumptions and estimates relating to our ability to generate revenue from the development of new applications and products. While we believe our assumptions and the data underlying our estimates are reasonable, there are inherent challenges in measuring or forecasting such information. As a result, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. As a result, our estimates of the annual total addressable market and our forecasts of market growth and future revenue for our current or future products may prove to be incorrect. If the annual total addressable market or the potential market growth for our platform is smaller than we have estimated, it may impair our sales growth and have an adverse impact on our business, financial condition, results of operations and prospects.

New product development involves a lengthy and complex process and we may be unable to develop or commercialize new products on a timely basis, or at all.

Products from our research and development programs will take time and considerable resources to develop, and may include improvements or changes to our instruments, chip consumables and software, and we may not be able to complete development and commercialize them on a timely basis, or at all. There can be no assurance that

any of our applications and other products in development will produce commercial products and solutions and before we can commercialize any new products or workflows, we will need to expend significant funds in order to:

- conduct substantial research and development, which may include validation and proof of concept studies;
- further develop and scale our laboratory, engineering and manufacturing processes to accommodate different products and workflows; and
- further develop and scale our infrastructure to be able to analyze increasingly large amounts of data.

Our product and workflow development processes involve a high degree of risk, and these efforts may be delayed or fail for many reasons, including:

- failure of the product or workflow to perform as expected; and
- failure to reliably demonstrate the process advantages of our products or workflows.

In addition, if we are unable to generate additional data and insights from our research and development programs, then we may not be able to advance these programs as quickly, or at all, or without significant additional investment, all of which could have a material adverse effect on our product and workflow development efforts.

Even if we are successful in developing new products or workflows, it will require us to make significant additional investments in marketing and selling resources in order to commercialize any such products or workflows. As a result, we may be unsuccessful in commercializing new products or workflows that we develop, which could adversely affect our business, financial condition, results of operations and prospects.

Our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results have fluctuated significantly in the past and may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the level of demand for our platform, which may vary significantly;
- the length of time of the sales cycle for purchases of our products;
- the timing and cost of, and level of investment in, research, development and commercialization activities relating to our products, which may change from time to time;
- the mix of our products sold and the geographies in which they are sold period to period;
- the relative reliability and robustness of our IsoSpark and IsoLight instruments;
- the introduction of new products or product enhancements by us or others in our industry;
- expenditures that we may incur to acquire, develop or commercialize additional products and technologies;
- expenditures involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;
- changes in governmental regulations;
- future accounting pronouncements or changes in our accounting policies; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The effect of one of the factors discussed above, or the cumulative effects of a combination of factors discussed above, could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a

result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

Our business, financial condition, results of operations and prospects may be harmed if our customers discontinue or spend less on research, development and production and other scientific endeavors.

Our customers include biopharmaceutical companies and academic and research institutions. Many factors, including public policy spending priorities, available resources and product and economic cycles, have a significant effect on the capital spending policies of these entities. Fluctuations in the research and development budgets of our customers could have a significant effect on the demand for our products. Our customers determine their research and development budgets based on several factors, including the need to develop new products, continued availability of governmental and other funding, competition and the general availability of resources. If our customers' research and development budgets are reduced, the impact could adversely affect our business, financial condition, results of operations and prospects.

If we are unable to maintain and expand sales and marketing capabilities, we may not be successful in increasing sales of our existing products or commercializing new products.

We may not be able to market, sell or distribute our current products, or future products that we may develop, effectively enough to support our planned growth.

Competition for employees capable of selling expensive instruments and related products within the pharmaceutical and biotechnology industries is intense. As of March 31, 2021, we employed a commercial team of approximately 135 team members, but we may not be able to retain existing personnel or attract new personnel or be able to maintain, and continue to build, an efficient and effective sales organization, which could negatively impact sales and market acceptance of our products and limit our revenue growth and potential profitability. In addition, the time and cost of establishing and maintaining a specialized sales, marketing and service force for a particular product or service may be difficult to justify in light of the revenue generated or projected.

Our expected future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. Our future financial performance and our ability to increase sales of our existing products, commercialize new products and to compete effectively will depend, in part, on our ability to manage this potential future growth effectively, without compromising quality.

In addition, we utilize ten distributor relationships to market and sell our products in Europe, the Middle East and Asia-Pacific and we intend to leverage our distributor partnerships to expand into additional markets in the future. We exert limited control over these distributors under our agreements with them, and if their sales and marketing efforts for our products in any region are not successful, our business would be materially and adversely affected. Locating, qualifying and engaging distribution partners with local industry experience and knowledge will be necessary in at least the short to mid-term to effectively market and sell our products in certain countries outside the United States. We may not be successful in finding, attracting and retaining distribution partners, or we may not be able to enter into such arrangements on favorable terms. Even if we are successful in identifying distributors, such distributors may engage in sales practices that violate local laws or our internal policies, which could create civil or criminal liability for us. Furthermore, sales practices utilized by any such distribution parties that are locally acceptable may not comply with sales practices standards required under U.S. and other laws that apply to us, which could create additional compliance risk. If our sales and marketing efforts by us or our distributors are not successful outside the United States, we may not achieve our sales goals for our products outside the United States, which would materially and adversely impact our business, financial condition, results of operations and prospects.

If we do not successfully manage the development and launch of new products, our operating results could be adversely affected.

Further development and commercialization of our current and future products are key elements of our growth strategy. For example, we completed our first sale of our IsoSpark instrument in the first quarter of 2021 and we intend to launch additional new products in the next six to twelve months. The expenses or losses associated with unsuccessful product development or launch activities, our inability to improve the functionality or reliability and

robustness of our current products, or lack of market acceptance of our new products could adversely affect our business, financial condition, results of operations and prospects. This future growth could create strain on our organizational, administrative and operational infrastructure, including laboratory operations, quality control, customer service and sales organization management.

If we fail to offer high-quality customer service, our business and reputation could suffer.

Ensuring high-quality customer service is important for the growth of our business and any failure to maintain such standards of customer service, or a related market perception, could affect our ability to sell products to existing and prospective customers. Additionally, we believe our customer service team has a positive influence on recurring chip consumables revenue. Providing an exceptional customer experience requires significant time and resources from our customer service team. Potential impacts of the COVID-19 pandemic on the health and safety of our customer service organization could reduce or eliminate the organization's ability to provide an exceptional customer experience. Additionally, the organization's ability to provide on-site, in-person customer service (including on-site installation of our instruments) has and may continue to be restricted or eliminated due to the impacts of the COVID-19 pandemic. Therefore, failure to scale our customer service organization adequately or impacts on our organization's ability to provide an exceptional customer experience may adversely impact our business, financial condition, results of operations and prospects.

Customers utilize our service teams and online content for help with a variety of topics, including how to use our products efficiently, how to integrate our products into existing workflows, how to determine which of our other products may be needed for a given experiment and how to resolve technical, analysis and operational issues if and when they arise. As we introduce new products and enhance existing products, we expect utilization of our customer service teams to increase. In particular, the introduction of new or improved products may require additional customer service efforts to ensure customers use such products correctly and efficiently. While we have developed significant resources for remote training, including an extensive library of online videos, we may need to rely more on these resources for future customer training or we may experience increased expenses to enhance our online and remote solutions, particularly due to the impacts of the COVID-19 pandemic. If our customers do not adopt these resources, we may be required to increase the staffing of our customer service team, which would increase our costs. Also, as our business scales, we may need to engage third-party customer service providers, which could increase our costs and negatively impact the quality of the customer experience if such third parties are unable to provide service levels equivalent to ours.

The number of our customers has grown significantly and such growth, as well as any future growth, will put additional pressure on our customer service organization. We may be unable to hire qualified personnel quickly enough or to the extent necessary to accommodate increases in demand.

In addition, as we continue to grow our operations and reach a global customer base, we need to be able to provide efficient customer service that meets our customers' needs globally at scale. In geographies where we sell through distributors, we rely on those distributors to provide customer service. If these third-party distributors do not provide a high-quality customer experience, our business operations and reputation may suffer.

Repair or replacement costs due to warranties we provide on our instruments could have a material adverse effect on our business, financial condition and results of operations.

We provide a one-year assurance-type warranty on our instruments. Existing and future warranties place us at the risk of incurring future repair and/or replacement costs. At the time revenue is recognized, we establish an accrual for estimated warranty expenses based on historical data and trends of product reliability and costs of repairing and replacing defective products. We exercise judgment in estimating the expected product warranty costs, using data such as the actual and projected product failure rates, estimated repair costs, freight, material, labor and overhead costs. While we believe that historical experience provides a reliable basis for estimating such warranty cost, unforeseen quality issues or component failure rates as well as significantly higher sales and the introduction of new products could result in future costs in excess of such estimates, or alternatively, improved quality and reliability in our products could result in actual expenses that are below those currently estimated. As of March 31,

2021, we had accrued expenses of \$176,000 relating to product warranty accruals. Substantial amounts of warranty claims could have a material adverse effect on our business, financial condition and results of operations.

Our Credit Agreement contains covenants, which restrict our operating activities, and we may be required to repay the outstanding indebtedness in an event of default, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

On December 30, 2020, we entered into the Credit Agreement, which provides for senior secured financing of up to \$50.0 million, consisting of (i) a \$25.0 million Tranche A term loan, (ii) a \$10.0 million Tranche B term loan and (iii) a \$15.0 million Tranche C term loan. The full amount of the Tranche A term loan was drawn on December 30, 2020 and the full amount of the Tranche B term loan was drawn on May 27, 2021. Our ability to draw the Tranche C term loan is subject to several conditions, including that the Administrative Agent shall have received evidence that we achieved total revenue of at least \$20.0 million for the twelve-month period then most recently ended. Unless accelerated prior to such date, all amounts outstanding under the Credit Agreement are due to be repaid on December 30, 2025. Until we have repaid such indebtedness, the Credit Agreement subjects us to various customary covenants, including requirements as to minimum liquidity and minimum total revenue and restrictions on our ability to incur indebtedness or guarantees, to subject our assets to any liens, to make investments and loans, to make capital expenditures, to engage in mergers, acquisitions and asset sales, to engage in new lines of business, to declare dividends, make payments or redeem or repurchase equity interests, to enter into agreements limiting restricted subsidiary distributions, to prepay, redeem or purchase certain indebtedness and to engage in certain transactions with affiliates. In particular, the Credit Agreement includes a quarterly minimum total revenue covenant for the applicable trailing twelve month period, which revenue threshold begins at approximately \$15.02 million for the twelve months ending June 30, 2021 and increases over time. In June 2021, we obtained from the lenders a waiver of the quarterly minimum total revenue covenant for the twelve months ending June 30, 2021 and a waiver of any event of default resulting from non-compliance with the quarterly minimum total revenue covenant. There can be no assurance as to our future compliance with the covenants under the Credit Agreement or that our lenders will waive any failure to satisfy such covenants under the Credit Agreement in the future. Our business may be adversely affected by these restrictions on our ability to operate our business.

We may be required to repay the amounts outstanding under the Credit Agreement if an event of default occurs under the Credit Agreement. An event of default will occur if, among other things, we fail to make required payments under the Credit Agreement; we breach any of our covenants under the Credit Agreement, subject to specified cure periods with respect to certain breaches; the Administrative Agent determines that a material adverse change (as defined in the Credit Agreement) has occurred; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on certain material indebtedness which would permit the acceleration of maturity of such indebtedness. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In such a case, we may be required to delay, limit, reduce or terminate our product development or operations or grant to others rights to develop and market products that we would otherwise prefer to develop and market ourselves. The Administrative Agent could also exercise its rights as secured lender to take possession of and to dispose of the collateral securing the term loans, which collateral includes substantially all of our property. Our business, financial condition, results of operations and prospects could be materially adversely affected as a result of any of these events.

Despite our level of indebtedness, we are able to incur more debt and undertake additional obligations. Incurring such debt or undertaking such additional obligations could further exacerbate the risks our indebtedness poses to our financial condition.

As of the date of this prospectus, we had approximately \$35.0 million in aggregate principal amount of outstanding indebtedness, in addition to \$15.0 million of unfunded delayed draw term loans available, subject to certain conditions, under the Credit Agreement. Despite our level of indebtedness, we may be able to incur significant additional indebtedness in the future, including in the event we refinance or replace our existing Credit Agreement. Although the Credit Agreement contains restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions. These restrictions also will not prevent us from incurring obligations that do not constitute indebtedness and, if we refinance existing indebtedness, such refinancing

indebtedness may contain fewer restrictions on our activities. To the extent new indebtedness is added to our currently anticipated indebtedness levels, the related risks that we face could intensify. While the Credit Agreement also contains restrictions on making certain investments and loans, these restrictions are subject to a number of qualifications and exceptions, and the investments and loans incurred in compliance with these restrictions could be substantial.

Changes in the method for determining LIBOR or the elimination of LIBOR could affect our business, financial condition, results of operations and prospects.

Our Credit Agreement provides that interest may be indexed to the London Interbank Offered Rate (“LIBOR”), which is a benchmark rate at which banks offer to lend funds to one another in the international interbank market for short term loans. On July 27, 2017, the United Kingdom Financial Conduct Authority, which regulates LIBOR, announced its intention to stop persuading or compelling banks to submit LIBOR quotations by the end of 2021. In 2020, ICE Benchmark Administration, which administers LIBOR publication, issued a consultation requesting feedback on its intention to continue publication of overnight and one-, three-, six- and 12-month USD LIBOR rates through June 30, 2023 (the “IBA Announcement”). There were concurrent announcements by the United Kingdom Financial Conduct Authority, U.S. bank regulators, the Federal Reserve Board and the Alternative Reference Rates Committee supporting the IBA Announcement and, among other things, encouraging banks to stop entering into new LIBOR-based contracts by the end of 2021. On March 5, 2021, ICE Benchmark Administration announced its intention to cease the publication of the one week and two month USD LIBOR rates after December 31, 2021 and the overnight and 12-month USD LIBOR rates after June 30, 2023. We cannot predict the impact of any changes in the methods by which LIBOR is determined or any regulatory activity related to a potential phase out of LIBOR on our Credit Agreement and interest rates. While our Credit Agreement provides for the use of an alternative rate to LIBOR in the event LIBOR is phased out, uncertainty remains as to any such replacement rate and any such replacement rate may be higher or lower than LIBOR may have been. At this time, no consensus exists as to what rate or rates will become accepted alternatives to LIBOR, although The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, is considering replacing LIBOR with the Secured Overnight Financing Rate (“SOFR”), a newly created index, calculated with a broad set of short-term repurchase agreements backed by treasury securities. It is not possible to predict the effect of these changes, other reforms or the establishment of alternative reference rates in the United States or elsewhere. The establishment of alternative reference rates or implementation of any other potential changes may materially and adversely affect our business, results of operations or financial condition.

We depend on our key personnel and other highly qualified personnel, and if we are unable to recruit, train and retain our personnel, we may not achieve our goals.

Our future success depends upon our ability to recruit, train, retain and motivate key personnel. Our senior management team, including Sean Mackay, one of our co-founders and our Chief Executive Officer; John Strahley, our Chief Financial Officer; Jing Zhou, our Chief Scientific Officer; and Peter Siesel, our Chief Commercial Officer, is critical to our vision, strategic direction, product development and commercialization efforts. The departure of one or more of our executive officers, senior management team members, or other key employees could be disruptive to our business until we are able to hire qualified successors. We do not maintain “key man” life insurance on our senior management team.

Our continued growth depends, in part, on attracting, retaining and motivating qualified personnel, including highly-trained sales personnel with the necessary scientific background and ability to understand our platform at a technical level to effectively identify and sell to potential new customers. New hires require significant training and, in most cases, take significant time before they achieve full productivity. Our failure to successfully integrate these key personnel into our business could adversely affect our business. In addition, competition for qualified personnel in our industry is intense. We compete for qualified scientific and information technology personnel with other life science and information technology companies as well as academic institutions and research institutions. Some of our scientific personnel are qualified foreign nationals whose ability to live and work in the United States is contingent upon the continued availability of appropriate visas. As a result, changes to United States immigration policies could restrain the flow of technical and professional talent into the United States and may inhibit our ability to hire qualified personnel. The current United States rules, regulations, policies and mandates restricting

immigration and reforming the work visa process may adversely affect our ability to retain and maintain qualified personnel.

We do not maintain fixed term employment contracts with any of our employees. As a result, our employees could leave our company with little or no prior notice and may be free to work for a competitor. Due to the complex and technical nature of our products and technology and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our business, results of operations, financial condition and prospects.

We depend on our information technology systems, and any failure of these systems could harm our business.

We depend on information technology and telecommunications systems for significant elements of our operations, including our laboratory information management system, our quality management system, our sales management system, and product lifecycle management system. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including for example, systems handling human resources, financial controls and reporting, contract management, regulatory compliance and other infrastructure operations. These information technology and telecommunications systems support a variety of functions, including manufacturing operations, laboratory operations, data analysis, quality control, customer service and support, billing, research and development activities, scientific and general administrative activities.

Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious software, bugs or viruses, human acts 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 disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business and our reputation, and we may be unable to regain or repair our reputation in the future.

Due to the significant resources required to enable access in new markets, we must make strategic and operational decisions to prioritize certain markets or technology offerings. We may expend our resources to access markets or develop technologies that do not yield meaningful revenue or we may fail to capitalize on markets or technologies that may be more profitable or with a greater potential for success.

We believe our platform has potential applications across a wide range of markets and we have targeted certain markets in which we believe our technology has significant advantages, or for which we believe we have a higher probability of success or revenue opportunity or for which the path to realizing or achieving revenue is shorter. For example, our initial focus has been on developing applications for cancer immunology and cell and gene therapy but we are expanding our capabilities to include applications for infectious diseases, inflammatory conditions and neurological disorders. We seek to maintain a process of prioritization and resource allocation to maintain a balance between advancing near-term opportunities and exploring additional markets for our technology. However, due to the significant resources required for the development of new applications for new markets, we must make decisions on which markets to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular applications may not lead to the development of any viable product and may divert resources away from better opportunities.

Our international business could expose us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States.

We currently sell our products in several international markets, including in Australia, China, Italy, Israel, Japan, New Zealand, Portugal, Singapore, South Korea, Spain, and Switzerland, and we intend to expand into additional international markets. We currently maintain relationships with distributors outside of the United States

and may in the future enter into new distributor relationships. Doing business internationally involves a number of risks, including:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, tariffs, economic sanctions and embargoes, employment laws, regulatory requirements and other governmental approvals, permits and licenses;
- failure by us or our distributors to obtain approvals to conduct our business in various countries;
- differing intellectual property rights;
- complexities and difficulties in obtaining intellectual property protection, enforcing our intellectual property and defending against third party intellectual property claims;
- difficulties in staffing and managing foreign operations;
- logistics and regulations associated with shipping systems and parts and components for instruments and chip consumables, as well as transportation delays;
- travel restrictions that limit the ability of marketing, presales, sales, services and support teams to service customers;
- 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 products and exposure to foreign currency exchange rate fluctuations;
- international trade disputes that could result in tariffs and other protective measures;
- 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 sales and distributors' activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act (the "FCPA"), its books and records provisions, or its anti-bribery provisions, or similar laws in other countries.

Any of these factors could significantly harm our current operations and potential future international expansion and consequently, our business, financial condition, results of operations and prospects. In addition, certain international markets are subject to significant political and economic uncertainty, including for example the effect of the withdrawal of the United Kingdom from the European Union. Significant political and economic developments in international markets for which we operate or intend to operate, or the perception that any of them could occur, creates further challenges for operating in these markets in addition to creating instability in global economic conditions.

Our products could have defects or errors, which may give rise to claims against us, adversely affect market adoption of our products, and adversely affect our business, financial condition, and results of operations.

Our instruments, chip consumables and services utilize novel and complex technology and may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects, or errors will not arise, including as we commercialize additional products. We provide warranties that our instruments will meet performance expectations and will be free from defects. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, we depend upon third parties for the supply of various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to produce our components to specification or provide defective products to us and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If our products contain defects, we may experience:

- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;
- increased warranty and customer service and support costs due to product repair or replacement;
- product recalls, withdrawals or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments to our service department; and
- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

If we were to be sued for product liability, we could face substantial liabilities that exceed our resources.

The marketing, sale and use of our products could lead to the filing of product liability claims were someone to allege that our products identified inaccurate or incomplete information regarding the cells analyzed or otherwise failed to perform as designed. We may also be subject to liability for errors in, a misunderstanding of or inappropriate reliance upon, the information we provide in the ordinary course of our business activities. If we cannot successfully defend ourselves against product liability claims, we could incur substantial liabilities and reputational harm. In addition, regardless of the merit or eventual outcome, product liability claims may result in:

- costs of litigation;
- distraction of management's attention from our primary business;
- the inability to commercialize existing or new products;
- decreased demand for our products;
- damage to our business reputation;
- product recalls or withdrawals from the market;
- termination of existing agreements by customers and suppliers; and
- loss of net sales.

We maintain product liability insurance that we believe is adequate, but this insurance is subject to deductibles and coverage limitations. Our current product liability insurance may not continue to be available to us on acceptable terms, if at all, and, if available, coverage may not fully protect us from the financial impact of defending against product liability claims. Any product liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. A product liability lawsuit, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could impact our business, financial condition, results of operations and prospects.

Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter and our policies have limits and significant deductibles. Some of the policies we currently maintain include general liability, property, umbrella and directors' and officers' insurance.

Any additional product liability insurance coverage we acquire in the future may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. A successful product liability claim or series of claims in which judgments exceed our insurance coverage could adversely affect our business, financial condition, results of operations and prospects, including preventing or limiting the commercialization of any products we develop.

We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our business, financial condition, results of operations and prospects.

We may need to raise additional capital to fund our existing operations, improve our platform or develop and commercialize new instruments, consumables and software, or expand our operations.

Based on our current business plan, we believe that the anticipated net proceeds from this offering, together with our existing cash will enable us to fund our operating expenses and capital expenditure requirements into the second half of 2024. If our available cash resources, net proceeds from this offering and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements including because of lower demand for our products or the realization of other risks described in this prospectus, we may be required to raise additional capital prior to such time through issuances of equity or convertible debt securities, entrance into a credit facility or another form of third party funding or seek other debt financing. There is no assurance we will be able to obtain future financing on commercially reasonable terms, or at all.

In any event, we may consider raising additional capital in the future to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons, including to:

- increase our sales and marketing efforts to drive market adoption of our platform and address competitive developments;
- fund development and marketing efforts of our existing products or any future products;
- expand our technologies into additional markets;
- acquire, license or invest in technologies and other intellectual property rights;
- acquire or invest in complementary businesses or assets; and
- finance capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our ability to achieve projected revenue growth;
- the cost of expanding our operations, including production capacity, lab space, and our offerings, including our sales and marketing efforts;
- our rate of progress in launching and commercializing new products, and the cost of the sales and marketing activities associated with increasing sales of our existing instruments and products;
- our rate of progress in, and cost of research and development activities associated with, products in research and development;
- the effect of competing technological and market developments;

- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;
- costs related to domestic and international expansion; and
- the potential cost of and delays in product development as a result of any regulatory oversight that may be applicable to our products.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders could result. Any preferred equity securities issued also could provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by borrowing debt, such debt would have rights, preferences and privileges senior to those of holders of our common stock. The terms of such debt could impose significant restrictions on our operations. If we raise funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our platform technologies or products or grant licenses on terms that are not favorable to us or commit to future payment streams. Market volatility resulting from the COVID-19 pandemic or other factors may further adversely impact our ability to raise capital as and when needed.

If we are unable to obtain adequate financing or financing on terms satisfactory to us, if we require it, our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are subject to differing tax rates in several jurisdictions in which we operate, which may adversely affect our business, financial condition, results of operations and prospects.

We are subject to taxes in the United States and certain foreign jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions, including the United States, may be subject to change. Our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities and changes in tax laws or their interpretation. In addition, we may be subject to income tax audits by various tax jurisdictions. Although we believe our income tax liabilities are reasonably estimated and accounted for in accordance with applicable laws and principles, an adverse resolution by one or more taxing authorities could have a material impact on the results of our operations.

International tariffs applied to goods traded between the United States and China may adversely affect our business, financial condition, results of operations and prospects.

International tariffs, including tariffs applied to goods traded between the United States and China, may adversely affect our business, results of operations and financial condition. Since the beginning of 2018, there has been increasing rhetoric, in some cases coupled with legislative or executive action, from several U.S. and foreign leaders regarding the possibility of instituting tariffs against foreign imports of certain materials. More specifically, in March and April of 2018, the United States and China have applied tariffs to certain of each other's exports. The institution of trade tariffs both globally and between the United States and China specifically carries the risk of adversely affecting overall economic condition, which could have a negative impact on us as imposition of tariffs could cause an increase in the cost of our products and the components for our products, which may adversely affect our business, financial condition, results of operations and prospects.

Unfavorable U.S. or global economic conditions as a result of the COVID-19 pandemic, or otherwise, could adversely affect our ability to raise capital and our business, financial condition, results of operations and prospects.

While the potential economic impact brought by, and the duration of, the COVID-19 pandemic is difficult to assess or predict, the COVID-19 pandemic has resulted in, and may continue to result in, extreme volatility and disruptions in the capital and credit markets, reducing our ability to raise additional capital through equity, equity-linked or debt financings, which could negatively impact our short-term and long-term liquidity and our ability to operate in accordance with our operating plan, or at all. Additionally, our results of operations could be adversely affected by general conditions in the global economy and financial markets. If the operations of our suppliers are

impacted by the COVID-19 pandemic, we may not be able to source the necessary components and materials to build our products in sufficient quantities to meet demand. If the operations of our customers are impacted by the COVID-19 pandemic, including shutdowns of laboratories and delayed spending on instruments or chip consumables, we may not be able to sell our products or provide on-site, in-person customer service. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our products and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our customers' budgets or cause delays in their payments to us. Any of the foregoing could harm our business, and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our ability to raise capital, business, financial condition, results of operations and prospects.

Risks Related to Manufacturing and Supply

If we are unable to manufacture our instruments in high-quality commercial quantities successfully and consistently to meet demand, our growth will be limited.

We have, to date, manufactured approximately 230 of our instruments. We currently manufacture our instruments and chip consumables at our facilities in Branford, Connecticut. To manufacture our products in the quantities that we believe will be required to meet anticipated market demand, we will need to increase manufacturing capacity, which could involve significant challenges and may require additional quality controls. We may not successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all.

If there is a disruption to our manufacturing operations, whether from COVID-19 or some other disruptions, we will have no other means of producing our products until we restore our facility or develop alternative manufacturing facilities. Additionally, any damage to or destruction of our facility or equipment may significantly impair our ability to manufacture our products on a timely basis.

If we are unable to produce our products in sufficient quantities to meet anticipated customer demand, our business, financial condition, results of operations and prospects would be harmed. The lack of experience we have in producing commercial quantities of our products may also result in quality issues, and could result in product defects or errors or recalls.

We use biological and hazardous materials that require considerable expertise and expense for handling, storage and disposal and may result in claims against us.

We work with materials, including chemicals, biological agents and compounds that could be hazardous to human health and safety or the environment. Our operations also produce hazardous and biological waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. We are subject to periodic inspections by federal, state and local authorities to ensure compliance with applicable laws. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental laws and regulations may restrict our operations. If we do not comply with applicable regulations, we may be subject to fines and penalties.

In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes, which could cause an interruption of our commercialization efforts, research and development programs and business operations, as well as environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations. In the event of contamination or injury, we could be liable for damages or penalized with fines in an amount exceeding our resources and our operations could be suspended or otherwise adversely affected. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance.

Our manufacturing operations are dependent upon third party suppliers, including single source suppliers, making us vulnerable to supply shortages and price fluctuations, which could harm our business.

Our products contain several critical components, including lasers, circuit boards, antibodies and reagents. Some of the suppliers of critical components or materials are single source suppliers. Although we believe there are

suitable alternative suppliers for these components, the replacement of existing suppliers or the identification and qualification of suitable second sources may require significant time, effort and expense, and could result in delays in production, which could negatively impact our business operations and revenue. We do not have supply agreements with certain suppliers of these critical components and materials beyond purchase orders and, although we maintain a safety stock inventory at our facilities in Branford, Connecticut for certain critical components, forecasted amounts may be inaccurate and we may experience shortages as a result of serious supply problems with these suppliers. There can be no assurance that our supply of components will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable prices. In addition, loss of any critical component provided by a single source supplier could require us to change the design of our manufacturing process based on the functions, limitations, features and specifications of the replacement components.

In addition, several other non-critical components and materials that comprise our products are currently manufactured by a single supplier or a limited number of suppliers. In certain of these cases, we have not yet qualified alternate suppliers. A supply interruption or an increase in demand beyond our current suppliers' capabilities could harm our ability to manufacture our products unless and until new sources of supply are identified and qualified. Our reliance on these suppliers subjects us to a number of risks that could harm our business, including:

- interruption of supply resulting from modifications to or discontinuation of a supplier's operations;
- trade disputes or other political conditions or economic conditions;
- delays in the manufacturing operations of our suppliers, or in the delivery of parts and components to support such manufacturing operations, due to the impact of public health issues, endemics or pandemics, such as COVID-19;
- delays in product shipments resulting from uncorrected defects, reliability issues, or a supplier's variation in a component;
- a lack of long-term supply arrangements for key components with our suppliers;
- inability to obtain adequate supply in a timely manner, or to obtain adequate supply on commercially reasonable terms;
- difficulty and cost associated with locating and qualifying alternative suppliers for our components in a timely manner;
- a modification or change in a manufacturing process or part that unknowingly or unintentionally negatively impacts the operation of our platform;
- production delays related to the evaluation and testing of products from alternative suppliers, and corresponding regulatory qualifications;
- delay in delivery due to our suppliers prioritizing other customer orders over ours;
- damage to our brand reputation caused by defective components produced by our suppliers;
- increased cost of our warranty program due to product repair or replacement based upon defects in components produced by our suppliers; and
- fluctuation in delivery by our suppliers due to changes in demand from us or their other customers.

Any interruption in the supply of components or materials, or our inability to obtain substitute components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers, which would have an adverse effect on our business.

We forecast sales to determine requirements for components and materials used in our instruments, and if our forecasts are incorrect, we may experience delays in shipments or increased inventory costs.

We keep limited materials, components and finished products on hand. To manage our operations with our third party suppliers, we forecast anticipated product orders and material requirements to predict our inventory needs and enter into purchase orders on the basis of these requirements. Several components of our products require an order lead time of 3 months to 6 months. Our limited historical commercial experience and rapid growth may not provide us with enough data to consistently and accurately predict future demand. If our business expands and our demand for components and materials increase beyond our estimates, our suppliers may be unable to meet our demand. In addition, if we underestimate our component and material requirements, we may have inadequate inventory, which could interrupt, delay, or prevent delivery of our products to our customers. By contrast, if we overestimate our component and material requirements, we may have excess inventory, which would increase our expenses. Any of these occurrences would negatively affect our financial performance and business results.

Shipping is a critical part of our business and any changes in our shipping arrangements or damages or losses sustained during shipping could adversely affect our business, financial condition, results of operations and prospects.

We currently rely on third party vendors for our shipping. If we are not able to negotiate acceptable pricing and other terms with these entities or they experience performance problems or other difficulties, it could negatively impact our operating results and our customers' experience. In the past, some of our products have sustained serious damage in transit and were not repairable. Although we have taken steps to improve our shipping procedures, there is no guarantee our products will not become damaged or lost in transit in the future. If a product is damaged in transit, it may result in a substantial delay in the fulfillment of the customer's order, and depending on the type and extent of the damage and whether the incident is covered by insurance, it may result in a substantial financial loss. If our products are not delivered in a timely fashion or are damaged or lost during the delivery process, our customers could become dissatisfied and cease using our products or services, which would adversely affect our business, financial condition, results of operations and prospects.

If our facilities are damaged or become inoperable, we will be unable to continue to research, develop and manufacture our products and, as a result, our business, financial condition, results of operations and prospects may be adversely affected until we are able to secure a new facility.

We do not have redundant facilities for the final assembly of our products. Our facilities and equipment would be costly to replace and could require substantial lead-time to repair or replace. Our facilities may be harmed or rendered inoperable by natural or man-made disasters, including, but not limited to, tornadoes, flooding, fire and power outages. Such disasters may render it difficult or impossible to manufacture our products and conduct our research and development activities for new products. The inability to perform those activities, combined with our limited materials, components and finished products, may result in the inability to continue manufacturing or supplying our products during such periods and the loss of customers or harm to our reputation. Although we possess insurance for damage to our facilities and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and this insurance may not continue to be available to us on acceptable terms, or at all.

If we fail to maintain our numerous contractual relationships, our business, results of operations and financial condition could be adversely affected.

We are party to numerous contracts in the normal course of our business, including our supply and distribution agreements. In the aggregate, these contractual relationships are necessary for us to operate our business. From time to time, we amend, terminate or negotiate our contracts. We may also periodically be subject to, or make claims of breach of contract, or threaten legal action relating to our contracts. These actions may result in litigation. At any one time, we have a number of negotiations under way for new or amended commercial agreements. We devote substantial time, effort and expense to the administration and negotiation of contracts involved in our business. However, these contracts may not continue in effect past their current term or we may not be able to negotiate

satisfactory contracts in the future with current or new business partners, which may adversely affect our business, financial condition, results of operations and prospects.

Risks Related To Government Regulation

If our current or future products become subject to FDA or other related international regulation, the regulatory clearance or approval and the maintenance of continued and post-market regulatory compliance for such products will be expensive, time-consuming, and uncertain both in timing and in outcome.

We make our platform, which includes our instruments, chip consumables and software, available to customers as research-use-only (“RUO”) products. While products which are marketed and sold for RUO are not generally subject to regulation by the Food and Drug Administration (the “FDA”), regulatory requirements related to marketing, selling, and distribution of RUO products could change or be uncertain. Additionally, even if our products are labeled, promoted, and intended as RUO, the FDA or comparable agencies of other countries could disagree with our conclusion that our products are intended for research use only or deem our sales, marketing and promotional efforts as being inconsistent with RUO products. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, results of operations and prospects could be adversely affected.

In the event that we decide in the future to develop medical device products or modify our existing products in a manner intended for clinical or diagnostic uses, or if our existing platform were ever to be deemed a medical device by the FDA, we would be required in the United States to either receive clearance under Section 510(k) of the Federal Food, Drug, and Cosmetic Act or approval of a premarket approval application from the FDA, unless an exemption applies, prior to marketing any such product. The process of obtaining approval or clearance from the FDA for new products, or with respect to enhancements or modifications to existing products, could take a significant period of time, require the expenditure of substantial resources, involve rigorous preclinical and clinical testing, require changes to products or result in limitations on the indicated uses of products. There can be no assurance that we would receive the required approvals or clearances for any new products or for modifications to our existing products on a timely basis or that any approval or clearance would not be subsequently withdrawn or conditioned upon extensive post-market study requirements. Moreover, even if we were to receive FDA clearance or approval of new products or modifications to existing products, we would be required to comply with extensive regulations relating to the development, research, clearance, approval, distribution, marketing, advertising and promotion, manufacture, adverse event reporting, recordkeeping, import and export of such products, which could substantially increase our operating costs and have a material impact on our business, profits and results of operations. Failure to comply with applicable regulations could jeopardize our ability to sell our products and result in enforcement actions such as warning letters, fines, injunctions, civil penalties, termination of distribution, recalls or seizures of products, delays in the introduction of products into the market, total or partial suspension of production, refusal to grant future clearances or approvals, withdrawals or suspensions of current approvals, resulting in prohibitions on sales of our products, and in the most serious cases, criminal penalties. Occurrence of any of the foregoing could harm our reputation, business, financial condition, results of operations and prospects.

Our employees, consultants, distributors and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, consultants, distributors and commercial partners. Misconduct by these parties could include intentional failures to comply with the applicable laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. These laws and regulations may restrict or prohibit a wide range of pricing, discounting and other business arrangements. Such misconduct could result in legal or regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and any other precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, which could have a significant impact on our business. Whether or not

we are successful in defending against such actions or investigations, we could incur substantial costs, including legal fees and divert the attention of management in defending ourselves against any of these claims or investigations.

If we fail to comply with certain healthcare laws, including fraud and abuse laws, we could face substantial penalties and our business, results of operations, financial condition, and prospects could be adversely affected.

Even though we do not order healthcare services or bill directly to Medicare, Medicaid, or other third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse may be applicable to our business. We could be subject to healthcare fraud and abuse laws of both the federal government and the states in which we conduct our business. Because of the breadth of these laws and the narrowness of available statutory and regulatory exceptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including administrative, civil and criminal penalties, damages, fines, imprisonment, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business and our financial results.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our products and technologies, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be impaired.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary products and technologies, 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 obtain, maintain, protect and enforce our intellectual property, third parties may be able to compete more effectively against us. In addition, we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage of our products, our competitive position could be adversely affected, as could our business, financial condition, results of operations and prospects. Both the patent application process and the process of managing patent and other intellectual property disputes can be time-consuming and expensive.

Our success depends in large part on our and our licensors' ability to obtain and maintain protection of the intellectual property we may own solely and jointly with, or license from, third parties, particularly patents, in the United States and other countries with respect to our products and technologies. We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, obtaining and enforcing patents is costly, time-consuming and complex, and we may fail to apply for patents on important products and technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and protect any patents that may issue from such patent applications, at a reasonable cost or in a timely manner or in all jurisdictions. It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, claim scope or requests for patent term adjustments. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. If we delay filing a patent application, and a competitor files a patent application on the same or similar invention before we do, our ability to secure patent rights may be limited and we may not be able to patent the invention at all. Even if we can patent the invention, we may be able to patent only a limited scope of the invention, and the limited scope may be inadequate to protect our products and technologies, or to block competitor's products and technologies that are similar or adjacent to ours. Our earliest patent filings have been published. A competitor may review our published patents and arrive at the same or similar technology advances for our products as we developed. If the competitor files a patent application on such an

advance before we do, then we may no longer be able to protect that aspect of our products and technologies and we may require a license from the competitor, which may not be available on commercially viable terms. Moreover, we may not develop additional proprietary products, methods and technologies that are patentable. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed from or to third parties. Therefore, these patents and applications may not be prosecuted and enforced by such third parties in a manner consistent with the best interests of our business.

In addition, the patent position of life sciences technology companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries or regions may diminish the value of our intellectual property. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages, or may be challenged, narrowed and invalidated by third parties. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. It is possible that third parties will design around our current or future patents such that we cannot prevent such third parties from using similar technologies and commercializing similar products to compete with us. Some of our owned or licensed patents or patent applications may be challenged at a future point in time and we may not be successful in defending any such challenges made against our patents or patent applications. Any successful third-party challenge to our patents could result in the narrowing, unenforceability or invalidity of such patents and increased competition to our business. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, regardless of success, may take substantial time and result in substantial cost, and may divert our efforts and attention from other aspects of our business. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

Further, while software and other of our proprietary works may be protected under copyright law, we have chosen not to register any copyrights in these works, and instead, we primarily rely on protecting our software as a trade secret. In order to bring a copyright infringement lawsuit in the United States, the copyright must be registered. Accordingly, the remedies and damages available to us for unauthorized use of our software may be limited.

The U.S. law relating to the patentability of certain inventions in the life sciences technology industry is uncertain and rapidly changing, which may adversely impact our existing patents or our ability to obtain patents in the future.

Changes in either the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For instance, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application is entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either file any patent application related to our products and other proprietary technologies or invent any of the inventions claimed in our or our licensor's patents or patent applications. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing the claimed invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license.

In addition, the America Invents Act implemented changes that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors or other third parties to challenge the validity of our patents. These changes include allowing third-party submission of prior art to the United States Patent and Trademark Office (USPTO) during patent prosecution and additional procedures to challenge the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. Further, because of a lower evidentiary standard in these USPTO post-

grant proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Various courts, including the U.S. Supreme Court, have rendered decisions that impact the scope of patentability of certain inventions or discoveries relating to the life sciences technology. Specifically, these decisions stand for the proposition that patent claims that recite laws of nature are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a “sufficient” additional feature is uncertain. Furthermore, in view of these decisions, since December 2014, the USPTO has published and continues to publish revised guidelines for patent examiners to apply when examining process claims for patent eligibility.

In addition, U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that may have a material adverse effect on our ability to obtain new patents and to defend and enforce our existing patents and patents that we might obtain in the future.

We cannot assure you that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO or other similar patent offices around the world. 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, scope and validity of patents within the life sciences technology and any such changes, or any similar adverse changes in the patent laws of other jurisdictions, could have a negative impact on our business, financial condition, prospects and results of operations.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our products and technologies in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and we and our licensors may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we and our licensors may not be able to prevent third parties from practicing our inventions in some or all countries outside the United States, or from selling or importing products made using our or our licensors’ inventions in and into the United States or other jurisdictions. Competitors and other third parties may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and technologies and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products. Our and our licensors’ patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries do not favor the enforcement of patents and other

intellectual property protection, which could make it difficult for us to stop the misappropriation or other violations of our intellectual property rights including infringement of our patents in such countries. The legal systems in certain countries may also favor state-sponsored or companies headquartered in particular jurisdictions over our first-in-time patents and other intellectual property protection. The absence of harmonized intellectual property protection laws and effective enforcement makes it difficult to ensure consistent respect for patent, trade secret, and other intellectual property rights on a worldwide basis. As a result, it is possible that we will not be able to enforce our rights against third parties that misappropriate our proprietary technology in those countries.

Proceedings to enforce our or our licensors' patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our and our licensors' patents at risk of being invalidated or interpreted narrowly and our and our licensors' patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We and our licensors may not prevail in any lawsuits that we or any of our licensors initiate, or that are initiated against us or any of our licensors, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain adequate protection for our products, services and other technologies and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

Any of our issued patents covering our products could be narrowed or found invalid or unenforceable if challenged in court or before administrative bodies in the United States or abroad, including the USPTO.

Our owned and licensed patents and patent applications may be subject to validity, enforceability and priority disputes. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability. Some of our patents or patent applications (including licensed patents and patent applications) may be challenged at a future point in time in opposition, derivation, reexamination, inter partes review, post-grant review or interference or other similar proceedings. Any successful third-party challenge to our or our licensors' patents in this or any other proceeding could result in the unenforceability or invalidity of such patents, which may lead to increased competition to our business, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, if we or our licensors initiate legal proceedings against a third party to enforce a patent covering our products, the defendant could counterclaim that such patent covering our products, as applicable, is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. There are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the relevant patent office, or made a misleading statement, during prosecution. A litigant or the USPTO itself could challenge our patents on this basis even if we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith. The outcome following such a challenge is unpredictable. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include ex parte re-examination, inter partes review, post-grant review and derivation proceedings in the U.S., and equivalent proceedings in non-U.S. jurisdictions, such as opposition proceedings. Such proceedings could result in revocation of or amendment to our or our licensors' patents in such a way that they no longer cover and protect our products. With respect to the validity of our or our licensors' patents, for example, we cannot be certain that there is no invalidating prior art of which we, our licensors, our or their respective patent counsel and the patent examiner were unaware during prosecution. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant or other third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on certain aspects of our products and technologies, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license intellectual property, or develop or commercialize current or future products.

We may not be aware of all third-party intellectual property rights potentially relating to our products. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after filing or, in some cases, not until such patent applications issue as patents. We might not have been the first to make the inventions covered by each of our pending patent applications and we might not have been the first to file patent applications for these inventions. To determine the priority of these inventions, we may have to participate in interference proceedings, derivation proceedings or other post-grant proceedings declared by the USPTO, or other similar proceedings in non-U.S. jurisdictions, that could result in substantial cost to us and the loss of valuable patent protection. The outcome of such proceedings is uncertain. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant opposition proceedings that have not been extensively tested, and their outcome is therefore uncertain. Furthermore, if third parties bring these proceedings against our patents, regardless of the merit of such proceedings and regardless of whether we are successful, we could experience significant costs and our management may be distracted. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business could be harmed.

We rely heavily on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information and to maintain our competitive position. Certain elements of our products and technologies, including components of our software and processes for manufacturing, may involve proprietary know-how, information or technology that is not covered by patents. As such, we may consider trade secrets and know-how to be our primary intellectual property with respect to such aspects of our products and technologies. However, trade secrets and know-how can be difficult to protect. In particular, we anticipate that with respect to our technologies, these trade secrets and know how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel from academic to industry scientific positions.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties that may have or have had access to our trade secrets or proprietary technology and processes, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors or other third parties will not otherwise gain access (such as through cybersecurity breach) to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure, which could adversely impact our ability to establish or maintain a competitive advantage in the market. If we are required to assert our rights against such parties, it could result in substantial costs and be a distraction to management. Depending on the parties involved in such a breach, the available remedies may not provide adequate compensation for the value of the proprietary information disclosed to a third party.

Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had wrongfully obtained and was using our trade secrets, it would be expensive and time-consuming, it could distract our personnel, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets, if at all, and the damages and other remedies available for improper disclosure of proprietary information can differ substantially from those in the United States. We may need to share our proprietary information, including trade secrets, with future business partners, collaborators, contractors and other third parties located in countries with a heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors.

We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached and we may not have adequate remedies for such breach. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third party, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Competitors or third parties could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, design around our protected technology, develop their own competitive technologies that fall outside the scope of our intellectual property rights or independently develop our technologies without reference to our trade secrets. If any of our trade secrets were to be disclosed to or independently discovered by a competitor or other third party, it could materially and adversely affect our business, financial condition, results of operations and prospects.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers or claims otherwise challenging the inventorship of our patents and other intellectual property.

We have employed and expect to employ individuals who were previously employed at universities or other companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, advisors and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that our employees, advisors, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information of their former employers or other third parties, or to claims that we have improperly used or obtained such trade secrets. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel and face increased competition to our business. Any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with advisors, contractors and consultants. A loss of key research personnel work product could hamper or prevent our ability to commercialize potential products, which could harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. This type of litigation or proceeding could substantially increase our operating losses and reduce our resources available for development activities. Some of our competitors may be able to sustain the costs of this type of litigation or proceedings more effectively than we can because of their substantially greater financial resources.

Furthermore, we or our licensors may in the future be subject to claims by former employees, consultants or other third parties asserting an ownership right in our owned or licensed patents or patent applications as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our products or as a result of questions regarding co-ownership of potential joint inventions. Litigation may be necessary to resolve these and other claims challenging inventorship and/or ownership. An adverse determination in any such proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar technology, without payment to us, or could limit the duration of the patent protection covering our technology and products. Such challenges may also result in our inability to develop, manufacture or commercialize our products without infringing third-party patent rights. Also, our licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that our licensors may not be the sole and exclusive owners of the patents we in-license. If other third parties have ownership rights or other rights to our in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us,

we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Furthermore, individuals executing agreements with us may have pre-existing or competing obligations to a third party, such as an academic institution, and thus an agreement with us may be ineffective in perfecting ownership of inventions developed by that individual, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We may not be able to protect and enforce our trademarks and trade names or build name recognition in our markets of interest thereby harming our competitive position.

The registered or unregistered trademarks or trade names that we own may be challenged, infringed, circumvented, declared generic, lapsed or determined to be infringing on or dilutive of other marks. We may not be able to protect our rights in these trademarks and trade names, which we need in order to build name recognition. In addition, third parties have filed, and may in the future file, for registration of trademarks similar or identical to our trademarks, thereby impeding our ability to build brand identity and possibly leading to market confusion. If they succeed in registering or developing common law rights in such trademark or any other trademarks that are similar or identical to our trademarks, and if we are not successful in challenging such rights and defending against challenges to our trademarks, we may not be able to use such trademarks to develop brand recognition of our technologies, products or services. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Further, we may in the future enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation which may limit our ability to use our trade names or trademarks in certain fields of business. We may also license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and trade names by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively, and our business, financial condition, results of operations and prospects may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

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

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. While extensions may be available, the life of a patent, and the protection it affords, is limited. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date. Even if patents covering our products are obtained, once the patent life has expired, we may be open to competition from competitive products. If one of our products requires extended development, testing and/or regulatory review, patents protecting such products might expire before or shortly after such products are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours, which could have a material adverse effect on our business, financial condition and results of operations.

We may become involved in lawsuits to defend against third-party claims of infringement, misappropriation or other violations of intellectual property or to protect or enforce our intellectual property, any of which could be expensive, time consuming and unsuccessful, and may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our ability and the ability of future collaborators to develop, manufacture, market and sell our products and use our products and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the life sciences technology sector, as well as administrative proceedings for challenging patents, including interference, derivation, inter partes review, post grant review, and reexamination proceedings before the USPTO, or oppositions and other comparable proceedings in foreign jurisdictions. We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our products, manufacturing methods, software and/or technologies infringe, misappropriate or otherwise violate their intellectual property rights.

Numerous issued patents and pending patent applications that are owned by third parties exist in the fields in which we are developing our products and technologies. It is not always clear to industry participants, including us, the claim scope that may issue from pending patent applications owned by third parties or which patents cover various types of products, technologies or their methods of use or manufacture. Thus, because of the large number of patents issued and patent applications filed in our fields, it is difficult to conclusively assess our freedom to operate without infringing on third party rights and there may be a risk that third parties, including our competitors, may allege they have patent rights encompassing our products, technologies or methods and that we are employing their proprietary technology without authorization. We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our products in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect. For example, we may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third-party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

If third parties, including our competitors, believe that our products or technologies infringe, misappropriate or otherwise violate their intellectual property, such third parties may seek to enforce their intellectual property, including patents, by filing an intellectual property-related lawsuit, including patent infringement lawsuit, against us. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. The patents and patent applications such third parties seek to enforce could be construed to cover our products and technologies. If any of these third parties were to assert these patents against us and we are unable to successfully defend against any such assertion, we may be required, including by court order, to cease the development and commercialization of the infringing products or technology and we may be required to redesign such products and technologies so they do not infringe such patents, which may not be possible or may require substantial monetary expenditures and time. We could also be required to pay damages, which could be significant, including treble damages and attorneys' fees if we are found to have willfully infringed such patents. We could also be required to obtain a license to such patents in order to continue the development and commercialization of the infringing product or technology. However, such a license may not be available on commercially reasonable terms or at all, including because certain of these patents are held by or may be licensed to our competitors. Even if such license were available, it may require substantial payments or cross-licenses under our intellectual property rights, and it may only be available on a non-exclusive basis, in which case third parties, including our competitors, could use the same licensed intellectual property to compete with us. Additionally, if our products are found to infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our licensees and other parties with whom we have business relationships, and we may be required to indemnify those parties for any damages they suffer as a result of

these claims. The claims may require us to initiate or defend protracted and costly litigation on behalf of licensees and other parties regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of those parties or may be required to obtain licenses for the products they use. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operation or prospects.

We may choose to challenge, including in connection with any allegation of patent infringement by a third party, the patentability, validity or enforceability of any third-party patent that we believe may have applicability in our field, and any other third-party patent that may be asserted against us. Such challenges may be brought either in court or by requesting that the USPTO, European Patent Office (EPO), or other foreign patent offices review the patent claims, such as in an ex-parte reexamination, inter partes review, post-grant review proceeding or opposition proceeding. However, there can be no assurance that any such challenge by us or any third party will be successful. Even if such proceedings are successful, these proceedings are expensive and may consume our time or other resources, distract our management and technical personnel. There can be no assurance that our defenses of non-infringement, invalidity or unenforceability will succeed.

Third parties, including our competitors, could be infringing, misappropriating or otherwise violating our owned and in-licensed intellectual property rights. Monitoring unauthorized use of our intellectual property is difficult and costly. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. From time to time, we seek to analyze our competitors' products and services, and may in the future seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property. However, the steps we have taken to protect our intellectual property rights may not be adequate to enforce our rights as against such infringement, misappropriation or violation of our intellectual property. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our products and technologies.

Litigation proceedings may be necessary for us to enforce our patent and other intellectual property rights. In any such proceedings, a court may refuse to stop the other party from using the technology at issue on the grounds that our owned and in-licensed patents do not cover the technology in question. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights, which could allow third parties to commercialize technology or products similar to ours and compete directly with us, without payment to us, or could require us to obtain license rights from the prevailing party in order to be able to manufacture or commercialize our products without infringing such party's intellectual property rights, and if we are unable to obtain such a license, we may be required to cease commercialization of our products and technologies, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects. The outcome in any such proceedings are unpredictable.

Regardless of whether we are defending against or asserting any intellectual property-related proceeding, any such intellectual property-related proceeding that may be necessary in the future, regardless of outcome, could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition, results of operations and prospects. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Some of our competitors and other third parties may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. We may not have sufficient financial or other resources to adequately conduct these types of litigation or proceedings. Any of the foregoing, or any uncertainties resulting from the initiation and continuation of any litigation, could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, financial condition, results of operations and prospects. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar adverse effect on our business, financial condition, results of operations and prospects.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States at several stages over the lifetime of the patents and/or applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In certain circumstances, we rely on our licensors to pay these fees due to the U.S. and non-U.S. patent agencies and to take the necessary action to comply with these requirements with respect to our licensed intellectual property. In many cases, an inadvertent lapse, including due to the effect of the COVID-19 pandemic on us, our licensors or our and our licensors' patent maintenance vendors, can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors and other third parties may be able to enter the market without infringing our patents, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We currently rely on licenses from third parties, and in the future may rely on additional licenses from other third parties, and if we lose any of these licenses, then we may be subjected to future litigation.

We are, and may in the future become, a party to license agreements that grant us rights to use certain intellectual property, including patents and patent applications, typically in certain specified fields of use. Currently, we rely on an in-license from certain third parties with respect to certain patent rights relating to multiplexed detection and high throughput single cell polyomics, certain patent rights relating to methods and compositions for quantifying metabolites and certain patent rights relating to the detection of target molecules. We may in the future rely on licenses from other third parties with respect to our technology. Our rights to use licensed technology in our business are subject to the continuation of and compliance with the terms of these licenses and any licenses we may enter into in the future. Some of these licensed rights provide us with freedom to operate for aspects of our products and technologies. As a result, any termination of these licenses could result in the loss of significant rights and could harm our ability to develop, manufacture and commercialize our products. We may need to obtain additional licenses from others to advance our research, development and commercialization activities. For instance, to the extent any additional intellectual property developed by our licensors is not included under our existing license agreements are necessary or useful for our products, we would need to negotiate for additional licenses to such additional intellectual property. Such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive.

Our success may depend in part on the ability of our licensors and any future licensors to obtain, maintain and enforce patent protection for our licensed intellectual property. Under our current license agreements and under any licenses we may enter into in the future, we may not have the right to control the prosecution, maintenance or enforcement of patents and patent applications that are licensed to us. Our licensors or any future licensors may not successfully prosecute the patent applications we license or prosecute such patent applications in our best interest. Even if patents issue in respect of these patent applications, our licensors and any future licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products and technologies for sale, which could materially adversely affect our competitive business position and harm our business, financial condition, results of operations and prospects.

Certain of our current license agreements impose, and future agreements may impose, various diligence, commercialization, milestone payment, royalty, insurance and other obligations on us and require us to meet development timelines, or to exercise commercially reasonable efforts to develop and commercialize licensed

products, in order to maintain the licenses. If we fail to comply with these obligations (including as a result of COVID-19 impacting our operations), we use the licensed intellectual property in an unauthorized manner or we are subject to bankruptcy-related proceedings, the terms of these license agreements may be materially modified, such as by rendering currently exclusive licenses non-exclusive, or by giving our licensors the right to terminate their respective agreement with us, in which event we would not be able to develop or market products or technology covered by the licensed intellectual property. With respect to any license agreement under which we are a sublicensee, if our current or future sublicensor fails to comply with its obligations under its upstream license agreement with its licensor, such licensor may have the right to terminate the upstream license, which may terminate our sublicense. If this were to occur, we would no longer have rights to the applicable intellectual property unless we are able to secure our own direct license with the owner of the relevant rights, which may not be available on commercially reasonable terms or at all. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Moreover, disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreements and other interpretation-related issues;
- our compliance with reporting, financial or other obligations under the license agreements;
- whether, and the extent to which, our products, technology and processes infringe on, misappropriate or otherwise violate the intellectual property of the licensors that is not subject to the licensing agreements;
- our right to sublicense the applicable intellectual or proprietary rights to third parties;
- our right to transfer or assign the license;
- our diligence obligations under the license agreements and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors; and
- the priority of invention of patented technology.

If we do not prevail in such disputes, we may lose any or all of our rights under such license agreements, experience significant delays in the development and commercialization of our products and technologies, or incur liability for damages, any of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. In addition, we may seek to obtain additional licenses from our licensors, and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the applicable licensor, including by agreeing to terms that could enable third parties, including our competitors, to receive licenses to a portion of the intellectual property that is subject to our existing licenses and to compete with our products.

Further, certain of our future agreements with third parties may limit or delay our ability to consummate certain transactions, may impact the value of those transactions, or may limit our ability to pursue certain activities. For example, we may in the future enter into license agreements that are not assignable or transferable, or that require the licensor's express consent in order for an assignment or transfer to take place.

In addition, the agreements under which we currently and in the future license intellectual property or technology from third parties are complex and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize any

affected products or services, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Absent the license agreements, we may infringe patents subject to those agreements, and if the license agreements are terminated, we may be subject to litigation by the licensor. Litigation could result in substantial costs to us and distract our management. If we do not prevail, we may be required to pay damages, including treble damages, attorneys' fees, costs and expenses and royalties or be enjoined from selling our products, which could adversely affect our ability to offer products or services, our ability to continue operations and our business, financial condition, results of operations and prospects.

If we cannot license rights to use technologies on reasonable terms, we may not be able to commercialize new products in the future.

We may identify third-party technology that we may need to license or acquire in order to develop or commercialize our products or technologies. However, we may be unable to secure such licenses or acquisitions. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us.

We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. In return for the use of a third party's technology, we may agree to pay the licensor royalties based on sales of our products or services. Royalties are a component of cost of products or technologies and affect the margins on our products. We may also need to negotiate licenses to patents or patent applications before or after introducing a commercial product. We may not be able to obtain necessary licenses to patents or patent applications, and our business may suffer if we are unable to enter into the necessary licenses on acceptable terms or at all, if any necessary licenses are subsequently terminated, if the licensor fails to abide by the terms of the license or fails to prevent infringement by third parties, or if the licensed intellectual property rights are found to be invalid or unenforceable.

Certain of our in-licensed patents are, and our future owned and in-licensed patents may be, subject to a reservation of rights by one or more third parties, including government march-in rights, that may limit our ability to exclude third parties from commercializing products similar or identical to ours.

Our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. For example, the U.S. government may have certain rights, including march-in rights, to patent rights and technology funded by the U.S. government under the Patent and Trademark Law Amendments Act, or the Bayh-Dole Act ("Bayh-Dole Act"). The U.S. government may have these rights in certain technologies licensed to us from certain third parties, including, to the extent any invention included within the following licensed patents has been funded by the U.S. government, certain patent rights relating to multiplexed detection and high throughput single cell polyomics, methods and compositions for quantifying metabolites and the detection of target molecules. We utilize these technologies in various products, including our IsoCode and CodePlex chips consumables.

Under the Bayh-Dole Act, when new technologies are developed with government funding, in order to secure ownership of such patent rights, the recipient of such funding is required to comply with certain government regulations, including timely disclosing the inventions claimed in such patent rights to the U.S. government and timely electing title to such inventions. Any failure to timely elect title to such inventions may permit the U.S. government to, at any time, take title to such inventions. Additionally, the U.S. government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. If the government decides to exercise these rights, it is not required to engage us as its contractor in connection with doing so. These rights may permit the U.S. government to disclose our confidential information to third parties and to exercise march-in rights to use or allow third parties to use our licensed technology. The U.S. government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to

alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. If the U.S. government exercises such march-in rights, we may receive compensation that is deemed reasonable by the U.S. government in its sole discretion, which may be less than what we might be able to obtain in the open market. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. While we currently believe such rights do not pose a material risk to our business, we cannot be sure that any licensed intellectual property will be free from governmental rights pursuant to the Bayh-Dole Act. Any exercise by the government of any of the foregoing rights could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, our current and future licensors may retain certain rights under their agreements with us, including the right to use the underlying technology for non-commercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our licensors limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our products contain third-party open source software components and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products and provide third parties access to our proprietary software.

Our products contain software licensed by third parties under open source software licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source software licensors generally do not provide support, warranties, indemnification or other contractual protections regarding infringement claims or the quality of the code. Some open source software licenses contain requirements that the licensee make its source code publicly available if the licensee creates modifications or derivative works using the open source software, depending on the type of open source software the licensee uses and how the licensee uses it. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source software licenses, be required to release the source code of our proprietary software to the public for free. This would allow our competitors and other third parties to create similar products with less development effort and time and ultimately could result in a loss of our product sales and revenue, which could have a material adverse effect on our business, financial condition, results of operations and prospects. Alternatively, to avoid the public release of the affected portions of our source code, we could be required to expend substantial time and resources to re-engineer some or all of our software. In addition, some companies that use third-party open source software have faced claims challenging their use of such open source software and their compliance with the terms of the applicable open source license. We may face claims from third parties claiming ownership of what we believe to be open source software, or claiming non-compliance with the applicable open source licensing terms, including claims that demand release of source code for the open source software, derivative works or our proprietary source code that was developed using, or that is distributed with, such open source software. These claims could also result in litigation and could require us to make our proprietary software source code freely available, devote additional research and development resources to re-engineer our platform, seek costly licenses from third parties or otherwise incur additional costs and expenses, any of which could result in reputational harm and would have a negative effect on our business and operating results. Use of open source software may also present additional security risks because the public availability of such software may make it easier for hackers and other third parties to compromise or attempt to compromise our platform.

Although we review our use of open source software to avoid subjecting our proprietary software to conditions we do not intend, the terms of many open source software licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products and proprietary software. Moreover, we cannot assure investors that our processes for monitoring and controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be subject to damages, required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not

be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, financial condition, results of operations and prospects.

Intellectual property rights do not necessarily address all potential threats.

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

- others may be able to make products that are similar to products and technologies we may develop or utilize similar technology that are not covered by the claims of the patents that we own or license now or in the future;
- we, or our licensors, might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or may own in the future;
- we, or our licensors, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing, misappropriating or otherwise violating our owned or licensed intellectual property rights;
- it is possible that our pending owned or licensed patent applications or those that we may own in the future will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business;
- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property; and
- our trade secrets or proprietary know-how may be unlawfully disclosed, thereby losing their trade secret or proprietary status.

Should any of these events occur, they could materially adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Our Common Stock and This Offering

Prior to this offering, there has been no public market for shares of our common stock and an active trading market for our common stock may never develop or be sustained.

Prior to this offering, there has been no public market for shares of our common stock. Although we have applied to list our common stock on Nasdaq, an active trading market for shares of our common stock may never develop or be sustained following this offering. If an active trading market does not develop, you may have difficulty selling your shares of our common stock at an attractive price, or at all. The price for shares of our common stock in this offering will be determined by negotiations among us and representatives of the underwriters, and it may not be indicative of prices that will prevail in the open market following the completion of this offering. Consequently, you may not be able to sell your shares of our common stock at or above the initial public offering

price or at any other price, or at the time that you would like to sell. An inactive market may also impair our ability to raise capital by selling shares of our common stock, our ability to motivate our employees through equity incentive awards, and our ability to acquire other companies, products or technologies by using our common stock as consideration for such acquisitions.

Our management team has broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We intend to use the net proceeds from this offering for general corporate purposes, including working capital, research and development, sales and marketing activities, general administrative matters, operating expenses and capital expenditures. See “Use of Proceeds.” At this time, we cannot specify with certainty the particular uses for the net proceeds from this offering. Our management has broad discretion over how these proceeds are to be used and could spend the proceeds in ways with which you may not agree. In addition, we might not use the proceeds of this offering effectively or in a manner that increases our market value or enhances our profitability. We have not established a timetable for the effective deployment of the proceeds, and we cannot predict how long it will take to deploy the proceeds.

Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, and also provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, each of which could limit our stockholders’ ability to choose the judicial forum for disputes with us or our directors, officers, stockholders, or employees.

Our amended and restated certificate of incorporation will provide that, subject to limited exceptions, the Court of Chancery for the State of Delaware will be the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders;
- any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware, our amended and restated certificate of incorporation or our amended and restated bylaws;
- any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or amended and restated bylaws; and
- any other action asserting a claim against us that is governed by the internal affairs doctrine.

As described below, this provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or Exchange Act, or rules and regulations thereunder.

Our amended and restated certificate of incorporation will also provide that the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. However, Section 22 of the Securities Act provides that federal and state courts have concurrent jurisdiction over lawsuits brought pursuant to the Securities Act or the rules and regulations thereunder. To the extent the exclusive forum provision restricts the courts in which claims arising under the Securities Act may be brought, there is uncertainty as to whether a court would enforce such a provision. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. This provision does not apply to claims brought under the Exchange Act.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to these provisions. These provisions may impose additional litigation costs on stockholders in pursuing any such claims, particularly if the stockholders do not reside in or near the State of Delaware, or limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for

disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business or financial condition.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect at the closing of this offering might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws and of state law may have anti-takeover effects and may delay, deter or prevent a takeover attempt that our stockholders might consider in their best interests. For example, such provisions or laws may prevent our stockholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. These anti-takeover provisions and laws may also make it more difficult for stockholders to elect directors of their choosing. Even in the absence of a takeover attempt, the existence of these anti-takeover provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future. See “Description of Capital Stock—Certain Anti-Takeover Provisions of our Amended and Restated Certificate of Incorporation, our Amended and Restated Bylaws and Delaware Law.”

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

As of December 31, 2020, we had net operating loss carryforward (NOLs) for federal purposes of approximately \$12.7 million, which expire at various dates through 2033 and approximately \$38.0 million which have no expiration. As of December 31, 2020, we also had state NOLs of approximately \$44.2 million, which expire at various dates through 2042. We may use these NOLs to offset against taxable income for U.S. federal and state income tax purposes. However, Section 382 of the Internal Revenue Code of 1986, as amended, may limit the NOLs we may use in any year for U.S. federal income tax purposes in the event of certain changes in ownership of our company. A Section 382 “ownership change” generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company’s stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. We have not conducted a 382 study to determine whether the use of our NOLs is impaired. We may have previously undergone multiple “ownership changes.” In addition, future issuances or sales of our stock, including certain transactions involving our stock that are outside of our control, could result in future “ownership changes.” “Ownership changes” that have occurred in the past or that may occur in the future could result in the imposition of an annual limit on the amount of pre-ownership change NOLs and other tax attributes we can use to reduce our taxable income, potentially increasing and accelerating our liability for income taxes, and also potentially causing those tax attributes to expire unused. States may impose other limitations on the use of our NOLs. Any limitation on using NOLs could, depending on the extent of such limitation and the NOLs previously used, result in our retaining less cash after payment of U.S. federal and state income taxes during any year in which we have taxable income, rather than losses, than we would be entitled to retain if such NOLs were available as an offset against such income for U.S. federal and state income tax reporting purposes, which could adversely impact our operating results.

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

We are an “emerging growth company,” as defined in the JOBS Act. For so long as we remain an emerging growth company, we are permitted by SEC rules and plan to rely on exemptions from certain disclosure requirements that are applicable to other SEC registered public companies that are not emerging growth companies.

These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the SOX, not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the consolidated financial statements, reduced disclosure

obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved, and being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus. As a result, the information we provide stockholders will be different than the information that is available with respect to other public companies. In this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. To the extent that we continue to qualify as a “smaller reporting company,” as such term is defined in Rule 12b-2 under the Securities Exchange Act of 1934, after we cease to qualify as an emerging growth company, we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the SEC. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, our consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution as a result of this offering.

The initial public offering price of our common stock is substantially higher than the net tangible book deficit per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book deficit per share after this offering. Based on the initial public offering price of \$ _____ per share, you will experience immediate dilution of \$ _____ per share, representing the difference between our pro forma net tangible book deficit per share after giving effect to this offering and the initial public offering price. In addition, purchasers of common stock in this offering will have contributed _____ % of the aggregate price paid by all purchasers of our stock but will own only approximately _____ % of our common stock outstanding after this offering. See “Dilution” for more detail.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell their shares, could result in a decrease in the market price of our common stock. Immediately after this offering, we will have _____ outstanding shares of common stock based on the number of shares outstanding as of _____, 2021. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. Of the remaining shares, shares are currently restricted as a result of securities laws or 180-day lock-up agreements but will be able to be sold after the offering as described in the section titled “Shares Eligible for Future Sale.” Moreover, after this offering, holders of an aggregate of up to _____ shares of our common stock issuable upon the conversion of the shares of our redeemable convertible preferred stock, concurrently with the closing of this offering, will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders as described in the section titled “Description of Capital Stock—Authorized Capital Stock—Registration Rights.” We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market, subject to volume limitations applicable to affiliates and the lock-up agreements described in the section titled “Underwriters.”

Your percentage ownership in us may be diluted by future issuances of capital stock, which could reduce your influence over matters on which stockholders vote.

Pursuant to our amended and restated certificate of incorporation and amended and restated bylaws as will be in effect upon the completion of this offering, our board of directors has the authority, without action or vote of our stockholders, to issue all or any part of our authorized but unissued shares of common stock, including shares issuable upon the exercise of options, or shares of our authorized but unissued redeemable convertible preferred stock. Issuances of shares of common stock or shares of voting preferred stock would reduce your influence over matters on which our stockholders vote and, in the case of issuances of shares of preferred stock, would likely result in your interest in us being subject to the prior rights of holders of that preferred stock.

Our directors, officers and principal stockholders have significant voting power and may take actions that may not be in the best interests of our other stockholders.

After this offering, our officers, directors and principal stockholders each holding more than 5% of our common stock will collectively control approximately % of our outstanding common stock. As a result, these stockholders, if they act together, may be able to exert significant influence over the management and affairs of our company and most matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change of control and might adversely affect the market price of our common stock. This concentration of ownership may not be in the best interests of our other stockholders.

We do not expect to pay any dividends for the foreseeable future and our indebtedness could limit our ability to pay dividends on our common stock. Investors in this offering may never obtain a return on their investment.

We have never declared or paid any cash dividends on our equity securities. We do not currently anticipate declaring or paying regular cash dividends on our common stock in the near term and you should not rely on an investment in our common stock to provide dividend income. We currently intend to use our future earnings, if any, to pay debt obligations, to fund our growth and develop our business and for general corporate purposes. Therefore, you are not likely to receive any cash dividends on your common stock in the near term, and the success of an investment in shares of our common stock will depend upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which they are initially offered. Any future declaration and payment of cash dividends or other distributions of capital will be at the discretion of our board of directors and the payment of any future cash dividends or other distributions of capital will depend on many factors, including our financial condition, earnings, cash needs, regulatory constraints, capital requirements (including requirements of our subsidiaries) and any other factors that our board of directors deems relevant in making such a determination. The agreement governing the indebtedness of our subsidiaries imposes restrictions on our subsidiaries' ability to pay dividends or other distributions to us, and future agreements governing debt our subsidiaries may enter into may impose similar restrictions. For more information, see "Dividend Policy." In addition, any future credit facility that we enter into may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. We cannot assure you that we will establish a dividend policy or pay cash dividends in the future or continue to pay any cash dividend if we do commence paying cash dividends pursuant to a dividend policy or otherwise.

General Risks

We may acquire businesses or form joint ventures or make investments in other companies or technologies that could negatively affect our operating results, could divert our management's attention, dilute our stockholders' ownership, increase our debt or cause us to incur significant expense.

We may pursue acquisitions of businesses and assets. We also may pursue strategic alliances and joint ventures that leverage our technologies and industry experience to expand our offerings or distribution. We have no experience with acquiring other companies and limited experience with forming strategic partnerships. We may not be able to find suitable partners or acquisition candidates, and we may not be able to complete such transactions on favorable terms, if at all. The competition for partners or acquisition candidates may be intense, and the negotiation process will be time-consuming and complex. If we make any acquisitions, we may not be able to integrate these

acquisitions successfully into our existing business, these acquisitions may not strengthen our competitive position, the transactions may be viewed negatively by customers or investors, we may be unable to retain key employees of any acquired business, relationships with key suppliers, manufacturers or customers of any acquired business may be impaired due to changes in management and ownership, and we could assume unknown or contingent liabilities. Any future acquisitions also could result in the incurrence of debt, contingent liabilities or future write-offs of intangible assets or goodwill, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects. If we were to issue additional equity in connection with such acquisitions, this may dilute our stockholders. We cannot guarantee that we will be able to fully recover the costs of any acquisition. Integration of an acquired company also may disrupt ongoing operations and require management resources that we would otherwise focus on developing our existing business. We may not realize the anticipated benefits of any acquisition, technology license, strategic alliance or joint venture. We also may experience losses related to investments in other companies, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

To finance any acquisitions or joint ventures, we may choose to issue shares of our common stock as consideration, which would dilute the ownership of our stockholders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common stock is low or volatile, we may not be able to acquire companies or fund a joint venture project using our stock as consideration.

We have identified a material weakness in our internal control over financial reporting, and the failure to remediate this material weakness may adversely affect our business, investor confidence in our company, our financial results and the market value of our common stock.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness we identified related to the lack of maintaining a sufficient complement of personnel commensurate with the accounting and financial reporting requirements in order to have adequate segregation of key duties and responsibilities, which affected the operation of controls over the recording of journal entries and the reconciliation of key accounts. This material weakness did not result in a material misstatement to the financial statements. We plan to implement measures designed to improve internal control over financial reporting to remediate the control deficiencies that led to our material weakness by, among other things, hiring qualified personnel with appropriate expertise to perform specific functions, and designing and implementing improved processes and internal controls.

While we believe the remedial efforts we will take will improve our internal controls and address the underlying causes of the material weakness, we cannot be certain that the steps we will take will be sufficient to remediate the control deficiencies that led to our material weakness in our internal controls over financial reporting or prevent future material weaknesses or control deficiencies from occurring. While we will work to remediate the material weakness as timely and efficiently as possible, at this time we cannot provide an estimate of costs expected to be incurred in connection with the implementation of our remediation actions, nor can we provide an estimate of the time it will take to complete our remediation actions. Neither our management nor an independent registered public accounting firm has performed an evaluation of our internal controls over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act because no such evaluation has been required.

If we fail to effectively remediate the material weakness in our internal controls over financial reporting described above, we may be unable to accurately or timely report our financial condition or results of operations. Such failure may adversely affect our business, investor confidence in our company, our financial condition and the market value of our common stock.

We are not currently required to comply with SEC rules that implement Section 404 of the Sarbanes-Oxley Act and are therefore not required to make a formal assessment of the effectiveness of our internal controls over financial reporting for that purpose. Upon becoming a public company, we will be required to comply with the SEC's rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act, which will require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of internal controls over financial reporting. Although we will be required to disclose changes

that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting on a quarterly basis, we will not be required to make our first annual assessment of our internal controls over financial reporting pursuant to Section 404 until at least our second annual report required to be filed with the SEC, and we will not be required to have our independent registered public accounting firm formally assess our internal controls for as long as we remain an “emerging growth company” as defined in the JOBS Act.

When formally evaluating our internal controls over financial reporting, we may identify material weaknesses that we may not be able to remediate in time to meet the applicable deadline imposed upon us for compliance with the requirements of Section 404 of the Sarbanes-Oxley Act. In addition, if we fail to achieve and maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. We cannot be certain as to the timing of completion of our evaluation, testing and any remediation actions or the impact of the same on our operations. If we are not able to implement the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner or with adequate compliance, our independent registered public accounting firm may issue an adverse opinion due to ineffective internal controls over financial reporting, and we may be subject to sanctions or investigation by regulatory authorities, such as the SEC. As a result, there could be a negative reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. Any such action could have a significant and adverse effect on our business and reputation, which could negatively affect our results of operations or cash flows. In addition, we may be required to incur additional costs in improving our internal control system and the hiring of additional personnel.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operation could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. We base our estimates on historical experience and estimates and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. For example, in connection with the implementation of the new revenue accounting standard, management makes judgments and assumptions based on our interpretation of the new standard. The new revenue standard is principle-based and interpretation of those principles may vary from company to company based on their unique circumstances. It is possible that interpretation, industry practice and guidance may evolve as we apply the new standard. If our assumptions underlying our estimates and judgements relating to our critical accounting policies change or if actual circumstances differ from our assumptions, estimates or judgements, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

We expect to incur significant additional costs as a result of being a public company, which may adversely affect our business, financial condition, results of operations and prospects.

As a public company, we will incur significant legal, accounting, compliance and other expenses that we did not incur as a private company and these expenses may increase even more after we are no longer an “emerging growth company.” Our management and other personnel will need to devote a substantial amount of time and incur significant expense in connection with compliance initiatives. For example, in anticipation of becoming a public company, we will need to adopt additional internal controls and disclosure controls and procedures, retain a transfer agent and adopt an insider trading policy. As a public company, we will bear all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under the securities laws.

In addition, regulations and standards relating to corporate governance and public disclosure, including SOX, and the related rules and regulations implemented by the SEC and Nasdaq, have increased legal and financial compliance costs and will make some compliance activities more time-consuming. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment will result in increased general and

administrative expenses and may divert management's time and attention from our other business activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us, and our business may be harmed. In connection with this offering, we intend to increase our directors' and officers' insurance coverage, which will increase our insurance cost. In the future, it may be more expensive or more difficult for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

Our quarterly results of operations are likely to fluctuate in the future as a publicly traded company. In addition, securities markets worldwide have experienced, and are likely to continue to experience, significant price and volume fluctuations. This market volatility, as well as general economic, market or political conditions, could subject the market price of our shares of common stock to wide price fluctuations regardless of our operating performance, which could cause a decline in the value of your investment. You should also be aware that price volatility may be greater if the public float and trading volume of shares of our common stock is low. Some factors that may cause the market price of our common stock to fluctuate, in addition to the other risks mentioned in this section of the prospectus, include:

- our operating and financial performance and prospects;
- our announcements or our competitors' announcements regarding new products or services, enhancements, significant contracts, acquisitions or strategic investments;
- changes in earnings estimates or recommendations by securities analysts who cover our common stock;
- fluctuations in our quarterly financial results or, in the event we provide it from time to time, earnings guidance, or the quarterly financial results or earnings guidance of companies perceived by investors to be similar to us;
- changes in our capital structure, such as future issuances of securities, sales of large blocks of common stock by our stockholders or the incurrence of additional debt;
- departure of key personnel;
- reputational issues;
- changes in general economic and market conditions, including related to the COVID-19 pandemic;
- changes in industry conditions or perceptions or changes in the market outlook for the life sciences technology industry; and
- changes in applicable laws, rules or regulations or regulatory actions affecting us or our clients and other dynamics.

These and other factors may cause the market price for shares of our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of our common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock sometimes have instituted securities class action litigation against the company that issued the stock. Securities litigation against us, regardless of the merits or outcome, could result in substantial costs and divert the time and attention of our management from the business, which could significantly harm our business, results of operation, financial condition or reputation.

Securities analysts may not publish favorable research or reports about our business or may publish no information at all, which could cause our stock price or trading volume to decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or securities analysts. If no or few analysts commence coverage of us, the trading price of our common stock could decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our common stock, the price of our common stock could decline. If one or more of these analysts cease to cover our common stock, we could lose visibility in the market for our common stock, which in turn could cause the price of our common stock to decline.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

In the ordinary course of our business, we collect and store sensitive data, including personally identifiable information, intellectual property and proprietary business information owned or controlled by ourselves or our employees, customers and other parties. We manage and maintain our applications and data utilizing a combination of on-site systems and cloud-based data centers. We utilize external security and infrastructure vendors to manage parts of our data centers. These applications and data encompass a wide variety of business-critical information, including research and development information, commercial information and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate use or disclosure, unauthorized access, inappropriate modification and the risk of our being unable to adequately monitor and audit and modify our controls over our critical information. This risk extends to the third party vendors and subcontractors we use to manage this sensitive data or otherwise process it on our behalf. The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take reasonable measures to protect sensitive data from unauthorized access, use or disclosure, no security measures can be perfect and our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such access, breach, or other loss of information could result in legal claims or proceedings, and liability under federal or state laws that protect the privacy of personal information, and regulatory penalties. Notice of breaches may be required to affected individuals or state, federal or foreign regulators, and for extensive breaches, notice may need to be made to the media or State Attorneys General. Such a notice could harm our reputation and our ability to compete.

We are currently subject to, and may in the future become subject to additional, U.S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue.

We are, and may increasingly become, subject to various laws and regulations, as well as contractual obligations, relating to data privacy and security in the jurisdictions in which we operate. The regulatory environment related to data privacy and security is increasingly rigorous, with new and constantly changing requirements applicable to our business, and enforcement practices are likely to remain uncertain for the foreseeable future. These laws and regulations may be interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that may have a material adverse effect on our business, financial condition, results of operations and prospects.

In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other

state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the California Consumer Privacy Act (“CCPA”), which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In November 2020, California voters passed the California Privacy Rights Act (“CPRA”), which will become effective in most material respects beginning on January 1, 2023. The CPRA further expands the CCPA with additional data privacy compliance requirements and obligations and establishes a regulatory agency dedicated to enforcing the CCPA and CPRA. In addition, laws in all 50 U.S. states require businesses to provide notice to consumers whose personal information has been disclosed as a result of a data breach. State laws are changing rapidly and there is discussion in the U.S. Congress of a new comprehensive federal data privacy law to which we would become subject if it is enacted.

Internationally, laws, regulations and standards in many jurisdictions apply broadly to the collection, use, retention, security, disclosure, transfer and other processing of personal information. For example, the E.U. General Data Protection Regulation (“GDPR”), which became effective in May 2018, greatly increased the European Commission’s jurisdictional reach of its data privacy and security laws and added a broad array of requirements for handling personal data. EU member states are tasked under the GDPR to enact, and have enacted, certain implementing legislation that adds to and/or further interprets the GDPR requirements and potentially extends our obligations and potential liability for failing to meet such obligations. The GDPR, together with national legislation, regulations and guidelines of the EU member states governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR includes requirements to establish a legal basis for processing, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals, a strengthened individual data rights regime, requirements to implement safeguards to protect the security and confidentiality of personal data, data breach notification obligations to appropriate data protection authorities or individuals, limitations on retention and secondary use of information and additional obligations when entities contract with third-party processors to process personal data. The GDPR authorizes fines for certain violations of up to 4% of global annual revenue or €20 million, whichever is greater. Following the withdrawal of the United Kingdom from the European Union, data privacy and security laws that are substantially similar to the GDPR are in effect in the United Kingdom, which carry similar risks and authorize similar fines for certain violations.

All of these evolving compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to modify our data processing practices and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or other third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies and other future conditions. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “predict,” “project,” “target,” “potential,” “seek,” “will,” “would,” “could,” “should,” “continue,” “contemplate,” “plan,” and other words and terms of similar meaning.

Forward-looking statements are subject to known and unknown risks and uncertainties, many of which may be beyond our control. We caution you that forward-looking statements are not guarantees of future performance or outcomes and that actual performance and outcomes may differ materially from those made in or suggested by the forward-looking statements contained in this prospectus. In addition, even if our results of operations, financial condition and cash flows, and the development of the markets in which we operate, are consistent with the forward-looking statements contained in this prospectus, those results or developments may not be indicative of results or developments in subsequent periods. New factors emerge from time to time that may cause our business not to develop as we expect, and it is not possible for us to predict all of them. Factors that could cause actual results and outcomes to differ from those reflected in forward-looking statements include, among others, the following:

- estimates of our addressable market, market growth, future revenue, expenses, capital requirements and our needs for additional financing;
- the implementation of our business model and strategic plans for our products and technologies;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business by expanding our sales to existing customers or introducing our products to new customers;
- our ability to develop and commercialize new products;
- our ability to establish and maintain intellectual property protection for our products or avoid or defend claims of infringement;
- the performance of third party suppliers;
- our ability to hire and retain key personnel and to manage our future growth effectively;
- our ability to obtain additional financing in future offerings;
- the volatility of the trading price of our common stock;
- our expectations regarding use of proceeds from this offering;
- the potential effects of government regulation;
- the impact of COVID-19 on our business; and
- our expectations about market trends.

We discuss many of these risks in greater detail under the section titled “Risk Factors.” Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

We estimate that the net proceeds we will receive from the issuance and sale of the shares of common stock offered by us in this offering will be approximately \$ million, assuming an initial public offering price of \$ per share, which is the midpoint of the range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase or decrease in the assumed initial public offering price of our common stock of \$ per share would increase or decrease, as applicable, the net proceeds to us from this offering by approximately \$, assuming that the number of shares offered, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase or decrease of 1,000,000 shares in the number of shares of common stock offered by us in this offering, as set forth on the cover page of this prospectus, would increase or decrease, as applicable, the net proceeds to us from this offering by approximately \$, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for general corporate purposes, including working capital, research and development, sales and marketing activities, general administrative matters, operating expenses and capital expenditures. At this time we cannot specify with certainty the particular uses for the net proceeds from this offering. We will have broad discretion over how to use the net proceeds from this offering, and our investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. Pending these uses, we intend to invest the net proceeds in short-term, investment-grade interest-bearing securities, such as money market accounts, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government. The principal purposes of this offering are to create a public market for our common stock, obtain additional capital, facilitate future access to public equity markets, increase awareness of the Company in the market, facilitate the use of our common stock as a means of attracting and retaining key employees and provide liquidity to our current stockholders.

DIVIDEND POLICY

We do not currently anticipate declaring or paying regular cash dividends on our common stock in the near term. Any future declaration and payment of cash dividends or other distributions of capital will be at the discretion of our board of directors and will depend on our financial condition, earnings, cash needs, capital requirements (including requirements of our subsidiaries), contractual, legal, tax and regulatory restrictions, and any other factors that our board of directors deems relevant in making such a determination. Therefore, we cannot assure you that we will pay any cash dividends or other distributions to holders of our common stock, or as to the amount of any such cash dividends or other distributions.

CAPITALIZATION

The following table sets forth our cash and capitalization as of March 31, 2021:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the Preferred Stock Conversion, (ii) the Series A-2 Warrant Exercise and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will be in effect at the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to (i) the pro forma adjustments set out above and (ii) the issuance and sale by us of shares of common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and our receipt of the estimated net proceeds from that sale after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information set forth in the table below is illustrative only and our cash and capitalization following the completion of this offering will adjust based on the actual initial public offering price, the number of common shares issued and sold in this offering and other terms of this offering determined when the initial public offering price is determined. You should read the following table in conjunction with the sections titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Description of Capital Stock” and our financial statements and related notes included elsewhere in this prospectus.

(in thousands, except share and per share data)	As of March 31, 2021		
	Actual (unaudited)	Pro Forma (unaudited)	Pro Forma As Adjusted ⁽¹⁾ (unaudited)
Cash	\$ 101,400	\$ 101,400	\$
Long term debt ⁽²⁾	22,292	22,292	
Warrant liability ⁽³⁾⁽⁴⁾	6,444	6,237	
Redeemable convertible preferred stock, \$0.001 par value; 3,442,340 shares authorized and 3,341,658 shares issued and outstanding on an actual basis; no shares authorized and no shares issued and outstanding on a pro forma and pro forma as adjusted basis	153,460	—	
Stockholders’ (deficit) equity:			
Common stock; \$0.001 par value; 4,647,474 shares authorized and 268,102 shares issued and outstanding on an actual basis; shares authorized and 3,612,939 shares issued and outstanding on a pro forma basis; shares authorized and shares issued and outstanding on a pro forma as adjusted basis	—	3	
Additional paid-in capital	1,253	154,917	
Accumulated deficit	(67,963)	(67,963)	
Total stockholders’ (deficit) equity	(66,710)	86,957	
Total capitalization	\$ 115,486	\$ 115,486	\$

(1) Each \$1.00 increase or decrease in the assumed initial public offering price of our common stock of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, each of cash, additional paid-in capital, total stockholders’ equity and total capitalization on a pro forma as adjusted basis by approximately \$, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1,000,000 share increase or decrease in the number of shares of common stock offered by us in this offering would increase or decrease, as applicable, each of cash, additional paid-in

capital, total stockholders' equity and total capitalization on a pro forma as adjusted basis by approximately \$, assuming no change in the assumed initial public offering price per share of our common stock of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

- (2) Does not include our borrowing of the \$10.0 million Tranche B term loan under the Credit Agreement on May 27, 2021.
- (3) In September 2015, we granted to Connecticut Innovations, Incorporated the Series A-2 Preferred Stock Warrant to purchase up to 3,178 shares of our Series A-2 redeemable convertible preferred stock. The Series A-2 Preferred Stock Warrant was exercised on May 11, 2021, at an exercise price of \$12.58608 per share for 3,178 shares of Series A-2 redeemable convertible preferred stock.
- (4) In December 2020, we granted to Perceptive Credit Holdings III, LP the Series D Preferred Stock Warrant to purchase up to 97,504 shares of our Series D redeemable convertible preferred stock. The Series D Preferred Stock Warrant is exercisable at an exercise price equal to \$76.92 per share until the tenth anniversary of the issue date. The Series D Preferred Stock Warrant is not automatically converted or required to be exercised as a result of the completion of this offering.

The pro forma and pro forma as adjusted columns in the table above are based on the number of shares of our common stock to be outstanding after this offering, which in turn is based on shares of common stock issued and outstanding as of , which gives effect to the Assumed Share Events set forth under the section titled "The Offering" and excludes:

- shares of our common stock issuable upon the exercise of the Series D Preferred Stock Warrant to purchase Series D redeemable convertible preferred stock as of that will become a warrant to purchase shares of common stock at an exercise price of \$ per share upon the closing of this offering;
- shares of our common stock issuable upon exercise of options to purchase shares of our common stock outstanding as of with a weighted-average exercise price of \$ per share; and
- shares of our common stock reserved for future issuance under our 2014 Plan as of .

DILUTION

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

Our historical net tangible book value (deficit) as of March 31, 2021 was \$, or \$ per share of common stock. Our historical net tangible book value (deficit) represents our total tangible assets less our total liabilities, which is not included within our stockholders' equity. Historical net tangible book value (deficit) per share represents historical net tangible book value divided by the shares of common stock outstanding as of .

Our pro forma net tangible book value (deficit) as of March 31, 2021 was \$, or \$ per share of common stock. Pro forma net tangible book value represents the amount of our total tangible assets less total liabilities. Pro forma net tangible book value (deficit) per share represents our pro forma net tangible book value (deficit) divided by , the total number of shares of common stock outstanding as of March 31, 2021, after giving effect to (i) the Preferred Stock Conversion, (ii) the Series A-2 Warrant Exercise and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will be in effect at the closing of this offering.

After giving further effect to the sale of shares of our common stock in this offering at the initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, less the underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value (deficit) as of would have been approximately \$ million, or \$ per share of common stock. This amount represents an immediate increase (decrease) in the pro forma as adjusted net tangible book value (deficit) of \$ per share to the existing stockholders and immediate dilution of \$ per share to investors purchasing shares of our common stock in this offering.

Dilution per share to new investors is calculated by subtracting pro forma as adjusted net tangible book value (deficit) per share of our common stock from the initial public offering price per share of our common stock paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book value (deficit) per share as of	
Increase (decrease) per share attributable to the pro forma adjustments described above	
Pro forma net tangible book value (deficit) per share as of	
Increase in pro forma net tangible book value (deficit) per share attributable to new investors purchasing shares of common stock in this offering	
Pro forma as adjusted net tangible book value (deficit) per share immediately after this offering	
Dilution in pro forma as adjusted net tangible book value (deficit) per share to new investors in this offering	\$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price, the number of shares of common stock sold by us in this offering and other terms of this offering determined at pricing. Each \$1.00 increase or decrease in the assumed initial public offering price of our common stock of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted net tangible book value per share after this offering by approximately \$ and the dilution per share to new investors by \$, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase of 1,000,000 shares in the number of shares of common stock offered by us would increase our pro forma as adjusted net tangible book value per share after this offering by \$ and decrease the dilution per share to new investors by \$, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses

payable by us. Each decrease of 1,000,000 shares in the number of shares of common stock offered by us would decrease our pro forma as adjusted net tangible book value per share after this offering by \$ _____ and increase the dilution per share to new investors by \$ _____, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise in full their option to purchase additional shares of common stock from us in this offering, our pro forma as adjusted net tangible book value (deficit) per share after the offering would be \$ _____, and the dilution per share to new investors would be \$ _____, in each case assuming an initial public offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, as of March 31, 2021, on the pro forma as adjusted basis described above, the total number of shares of our common stock purchased from us, the total consideration paid to us, and the average price per share of our common stock paid by purchasers of such shares and by new investors purchasing shares of our common stock in this offering:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders			\$		\$
New investors					
Total		100 %	\$	100 %	\$

The number of shares of our common stock that will be outstanding after this offering is based on _____ shares of common stock issued and outstanding as of _____, which gives effect to the Assumed Share Events set forth under the section titled “The Offering” and excludes:

- _____ shares of our common stock issuable upon the exercise of the Series D Preferred Stock Warrant to purchase Series D redeemable convertible preferred stock as of _____ that will become a warrant to purchase shares of common stock at an exercise price of \$ _____ per share upon the closing of this offering;
- _____ shares of our common stock issuable upon exercise of options to purchase shares of our common stock outstanding as of _____ with a weighted-average exercise price of \$ _____ per share; and
- _____ shares of our common stock reserved for future issuance under our 2014 Plan as of _____.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and related notes and other financial information appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a life sciences company building solutions to accelerate the development of curative medicines and personalized therapeutics. Our award-winning single-cell proteomics systems reveal unique biological activity in small subsets of cells, allowing researchers to connect more directly to *in vivo* biology and develop more precise and personalized therapies.

We are enabling deeper access to *in vivo* biology and driving durable and potentially transformational research on disease in a new era of advanced medicine. We believe our platform is the first to employ both proteomics and single cell biology in an effort to fully characterize and link cellular function to patient outcomes by revealing treatment response and disease progression. Our single cell proteomics platform, which includes instruments, chip consumables and software, provides an end-to-end solution to reveal a more complete view of protein function at an individual cellular level. Since our commercial launch in June 2018, our platform has been adopted by the top 15 global biopharmaceutical companies by revenue and nearly half of the comprehensive cancer centers in the United States to help develop more durable therapeutics, overcome therapeutic resistance, and predict patient responses for advanced immunotherapies, cell therapies, gene therapies, vaccines, and regenerative medicines. Our initial focus has been on developing applications of our platform for cancer immunology and cell and gene therapy. We are now expanding our capabilities to include applications for infectious diseases, inflammatory conditions, and neurological diseases.

We currently market and sell our technology with an in-house commercial team in the United States and Europe. We are also utilizing our distribution network to market and sell across multiple countries, including Australia, China, Italy, Israel, Japan, New Zealand, Portugal, Singapore, South Korea, Spain, and Switzerland. We intend to further expand our international presence by growing our distribution networks in Brazil, Canada, India, Mexico, Russia and beyond.

We manufacture our instruments and chip consumables in our manufacturing facilities in Branford, Connecticut and do not outsource any of our production manufacturing to third party contract manufacturers. Certain of our suppliers of components and materials are single source suppliers and we do not have supply agreements with certain suppliers of these critical components and materials beyond purchase orders. As part of our overall risk management strategy, we continue to evaluate and identify alternative suppliers for each of our components and materials.

Since our inception in March 2013, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, conducting research and development activities, and filing patent applications. To date, we have financed our operations primarily through the private placement of our securities, the incurrence of indebtedness and, to a lesser extent, grant income and revenue derived from sales of our instruments and chip consumables. As of March 31, 2021, our principal source of liquidity was cash, which totaled \$101.4 million.

We completed our first sale of our systems in June 2018 and have experienced significant revenue growth in recent periods. Revenue increased to \$10.4 million for the year ended December 31, 2020, as compared to \$7.5 million for the year ended December 31, 2019, and \$3.2 million for the three months ended March 31, 2021, as compared to \$1.6 million for the three months ended March 31, 2020. Nevertheless, we have incurred recurring

losses since inception. Our net losses were \$13.6 million and \$23.3 million for the years ended December 31, 2019 and 2020, respectively, and \$5.9 million and \$15.6 million for the three months ended March 31, 2020 and 2021, respectively. As of March 31, 2021, we had an accumulated deficit of \$68.0 million. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We expect our expenses will increase substantially in connection with ongoing development and business expansion activities, particularly as we continue to:

- expand our research and development activities;
- obtain, maintain and expand and protect our intellectual property portfolio;
- market and sell new and existing products and services; and
- attract, hire and maintain qualified personnel to support our expanding business efforts.

Furthermore, following the completion of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, compliance, investor relations and other expenses that we did not incur as a private company.

As a result of these anticipated expenditures, we will need substantial additional financing to support our continuing operations and pursue our growth strategy. Until such time as we can generate positive cash flows from operations, if ever, we expect to finance our operations through a combination of equity offerings, debt financings and, to a lesser extent, grant income. We may be unable to raise additional funds when needed on favorable terms or at all. Our inability to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenue to achieve profitability, and we may never do so.

As of March 31, 2021, we had cash of \$101.4 million. We believe that the anticipated net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses and capital expenditure requirements into the second half of 2024. Our future viability beyond that point is dependent on our ability to raise additional capital to finance our operations. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. See “—Liquidity and Capital Resources.”

Recent Developments

Patent Acquisition

On May 12, 2021, we entered into a Patent Purchase Agreement with the Sellers to purchase a collection of 86 patents related to DNA and RNA sequencing for an aggregate purchase price of \$20.0 million. We closed the acquisition on May 15, 2021, and funded the \$20.0 million purchase price with cash on hand. We believe that the acquired patents will enable integration of our existing proprietary proteomics technologies with new proprietary sequencing-based technologies. For more information about the purchased patents, see “Business—Intellectual Property.” In connection with entering into the Patent Purchase Agreement, we also entered into an Assumption Agreement with the Sellers to assume the Sellers’ rights and obligations under a covenant not to sue with a separate third party related to certain patents purchased pursuant to the Patent Purchase Agreement. In addition, in connection with entering into the Patent Purchase Agreement, we entered into a Supply Agreement with one of the Sellers pursuant to which they have agreed to supply certain reagents to us.

Amendment to Credit Agreement

On May 27, 2021, we entered into the First Amendment to the Credit Agreement to, among other things, split the previously remaining \$25.0 million delayed draw term loan commitments under the Credit Agreement into a \$10.0 million Tranche B term loan, available to be drawn upon the effectiveness of the First Amendment, and a \$15.0 million Tranche C term loan, available to be drawn subject to achievement of a revenue milestone set forth in the Credit Agreement. The full amount of the Tranche B term loan was drawn on May 27, 2021. We intend to use

the proceeds from the Tranche B term loan for general corporate purposes. See “Description of Certain Indebtedness—Secured Term Loan Facility.”

Key Factors Affecting Our Performance

We believe that our financial performance has been, and in the foreseeable future will continue to be, primarily driven by the following factors. While each of these factors presents significant opportunities for our business, they also pose important challenges that we must successfully address in order to pursue our growth strategy and improve our results of operations. Our ability to successfully address the factors below is subject to various risks and uncertainties, including those factors set forth in the “Risk Factors” section of this prospectus.

New Customer Adoption of Our Platform

Our financial performance has been, and in the foreseeable future will continue to be, driven by our ability to increase the adoption of our platform and the installed base of our instruments. We plan to drive new customer adoption through a direct sales and marketing organization in the United States and parts of Europe and third party distributors in Europe, the Middle East and Asia-Pacific. We currently market and sell our technology with an in-house commercial team of approximately 135 team members and also utilize our distribution network to market and sell across multiple countries.

Recurring Revenues from Sales of our Chip Consumables

Our IsoCode and CodePlex chip consumables represent a source of recurring revenue from customers using our platform across a wide range of applications. Our instruments and consumables are designed to work together exclusively. As we expand our installed base of instruments, we expect consumable revenues to increase on an absolute basis and become an increasingly important contributor to our overall revenues.

Adoption of Our Platform Across Existing Customers’ Organizations

There is an opportunity to grow our installed base and expand the number of instruments within organizations that are already utilizing our platform to advance their research and therapeutic development by their purchasing of additional instruments to support multiple locations or to increase capacity.

Adoption of Our Platform for New Applications

We founded our company to help solve critical challenges to accelerating advanced medicines and since our inception, we have developed multiple applications spanning cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases. As we continue to deploy our platform, we intend to concurrently expand the breadth of applications for our technologies to encourage increased use of our platform across our addressable markets. We expect our investments in these efforts to increase as we develop and market new applications, including a diagnostic.

Components of Our Results of Operations

Revenue

Revenue consists of sales of instruments and consumables in addition to service revenue. Our total revenue for the years ended December 31, 2019 and 2020 was \$7.5 million and \$10.4 million, respectively, and \$1.6 million and \$3.2 million for the three months ended March 31, 2020 and 2021, respectively. We expect that our revenue will be less than our expenses for the foreseeable future and that we will experience increasing losses as we continue to expand our business.

Cost of Product and Service Revenue

The Company’s cost of product revenue primarily consists of manufacturing related costs incurred in the production process, including personnel and related costs, costs of components and materials, labor and overhead,

packaging and delivery costs and allocated costs, facilities and information technology. Cost of service revenue consists primarily of personnel and related costs of service and warranty costs to support our customers.

Research and Development Expenses

Research and development expenses include:

- costs to obtain licenses to intellectual property and related future payments should certain success, development and regulatory milestones be achieved;
- employee-related expenses, including salaries, benefits and stock-based compensation expense;
- costs of purchasing lab supplies and non-capital equipment used in our research and development activities;
- consulting and professional fees related to research and development activities; and
- facility costs, depreciation, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance, and other supplies.

We expense research and development costs as incurred. We do not track research and development expenses by product candidate. Research and development activities are central to our business model. We expect research and development costs to increase significantly for the foreseeable future as our current development programs progress and new programs are added.

Because of the numerous risks and uncertainties associated with product development, we cannot determine with certainty the duration and completion costs of the current or future research and development efforts.

General and Administrative Expenses

General and administrative expenses consist primarily of employee-related expenses, including salaries, benefits and stock-based compensation, for personnel in executive, finance, business development, facility and administrative functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal fees relating to patent and corporate matters and fees for accounting, tax and consulting services.

We anticipate that our general and administrative expenses will increase in the future to support continued research and development activities and increased costs of operating as a public company. These increases will likely include increased costs related to the hiring of additional personnel and fees to outside consultants, lawyers and accountants, among other expenses. Additionally, we anticipate increased costs associated with being a public company, including services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance costs and investor and public relations costs.

Sales and Marketing Expenses

Sales and marketing expenses consist primarily of compensation related expenses, including salaries, bonuses, benefits, non-cash stock-based compensation, for sales and marketing personnel, advertising and promotion expenses, consulting and subcontractor fees, sales commissions, recruiting fees, and various other selling expenses. We anticipate that our sales and marketing expenses will increase in the future as we pursue our growth mission, including the hiring of consultants to help us identify and expand into new markets, including worldwide markets.

Grant Income

We are engaged in various Small Business Innovation Research (“SBIR”) grants with the federal government to help fund the costs of certain research and development activities. We believe that we have complied with all contractual requirements of the SBIR grants through the date of the financial statements. We do not currently expect future grant income to be a material source of funding for the Company.

Research and Development State Tax Credits

Research and development (“R&D”) tax credits exchanged for cash pursuant to the Connecticut R&D Tax Credit Exchange Program, which permits qualified small businesses engaged in R&D activities within Connecticut to exchange their unused R&D tax credits for a cash amount equal to 65% of the value of exchanged credits, are recorded as a receivable and other income in the year the R&D tax credits relate to, as it is reasonably assured that the R&D tax credits will be received, based upon our history of filing for and receiving the tax credits. R&D tax credits receivable where cash is expected to be received by us more than one year after the balance sheet date are classified as noncurrent in the consolidated balance sheets.

Fair Value Adjustment for Warrants and Loan Commitments

Warrants and loan commitments are freestanding financial instruments that qualify as liabilities and assets, respectively, required to be recorded at their estimated fair value at the inception date and remeasured at each reported balance sheet date thereafter until settlement, with gains and losses arising from changes in fair value recognized in the statement of operations during each period.

Results of Operations

Comparisons of the Three Months Ended March 31, 2020 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2021, together with the dollar change in those items:

(in thousands)	Three months ended March 31,		Period to period change
	2020	2021	
Revenue			
Product revenue	\$ 1,338	\$ 2,927	\$ 1,589
Service revenue	276	307	31
Total revenue	1,614	3,234	1,620
Cost of product revenue	761	1,549	788
Cost of service revenue	33	25	(8)
Gross Profit	820	1,660	840
Operating expenses:			
Research and development expenses	3,138	3,674	536
General and administrative expenses	1,790	4,378	2,588
Sales and marketing expenses	2,275	7,074	4,799
Total operating expenses	7,203	15,126	7,923
Loss from operations	(6,383)	(13,466)	(7,083)
Other income and (expense):			
Grant income	550	596	46
Change in fair value of warrants and loan commitment	(21)	(1,946)	(1,925)
Interest income	—	6	6
Interest expense	—	(749)	(749)
Net loss	\$ (5,854)	\$ (15,559)	\$ (9,705)

Revenue

Total revenue increased \$1.6 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020. This consisted of an increase of \$1.1 million for instruments and \$0.5 million for consumables. Service revenue remained relatively flat.

The increase in instruments revenue for the three months ended March 31, 2021 was driven by an increase in unit sales generated from a larger commercial team, primarily hired in 2020 and new executive leadership with the addition of our Chief Commercial Officer in the second quarter of 2020. The increase in consumable revenue in 2021 was driven by an increase in the number of units at customer locations.

Gross Profit

Gross profit as a percentage of total revenues was 51% for the three months ended March 31, 2020 and 2021. The gross profit percentage remained flat despite an increase in revenue, due to an increase in production costs as we expanded capacity to plan for future growth.

Research and Development Expenses

(in thousands)	Three months ended March 31,		Period to period change
	2020	2021	
Compensation related expenses	\$ 1,176	\$ 1,714	\$ 538
Professional fees and sub-contractor	157	324	167
Prototyping	300	394	94
Recruiting	3	165	162
Lab materials	73	179	106
Supplies expense	1,279	675	(604)
Depreciation and amortization	42	108	66
Other	108	115	7
Total	\$ 3,138	\$ 3,674	\$ 536

Research and development expenses increased by \$0.5 million, or 17%, for the three months ended March 31, 2021 compared to the three months ended March 31, 2020, primarily due to increases in compensation related expenses of \$0.5 million, a \$0.2 million increase in professional fees, an increase of \$0.2 million in recruiting, and an increase of \$0.1 million in prototyping. These increases were partially offset by a \$0.5 million decrease in lab materials and supplies expenses, largely relating to projects that became commercially viable in 2020.

General and Administrative Expenses

General and administrative expenses increased by \$2.6 million, or 145%, for the three months ended March 31, 2021 compared to the three months ended March 31, 2020, primarily due to increases in compensation related expenses of \$1.0 million, including increased salary, bonus, benefits, and non-cash stock-based compensation, for additional personnel due to an increase in headcount, including several executives, to support increased activities, an increase of \$0.8 million of professional fees, including legal, consulting, accounting, audit, an increase of \$0.3 million in patent expenses and an increase of \$0.2 million in recruiting expenses, an increase of \$0.1 million in depreciation and amortization, and increase of \$0.1 million in various other expenses. A large portion of our headcount increase at the executive level occurred in the second half of 2020.

Sales and Marketing Expenses

Sales and marketing expenses increased by \$4.8 million, or 211%, for the three months ended March 31, 2021 compared to the three months ended March 31, 2020, primarily due to increases in compensation related expenses of \$2.5 million, including increased salary, bonus, benefits, non-cash stock-based compensation, for additional personnel due to an increase in headcount to support increased activities, advertising and promotion expenses of \$0.7 million, consulting and recruiting of \$1.1 million, and various other office and selling expenses of \$0.6 million, partially offset by a decrease in travel and entertainment of \$0.1 million. Overall, the increase was driven by the increase in headcount to support our growth mission and the hiring of consultants to help us identify and expand into new markets, including worldwide markets. The majority of the headcount increase for sales and marketing occurred in the fourth quarter of 2020.

Change in fair value of warrants and loan commitments

As a result of changes in fair value, we recognized \$1.9 million change in fair value adjustment of warrants and loan commitments for the three months ended March 31, 2021.

Interest expense

As a result of the Credit Agreement we entered into on December 30, 2020, under which we borrowed \$25 million on December 30, 2020 and had \$25 million of borrowing outstanding as of March 31, 2021, we recognized \$0.7 million in interest expense for the three months ended March 31, 2021.

Comparisons of the Years Ended December 31, 2019 and 2020

The following table summarizes our results of operations for the years ended December 31, 2019 and 2020, together with the dollar change in those items:

	Year ended December 31,		Period to period change
	2019	2020	
	(in thousands)		
Revenue			
Product revenue	\$ 5,328	\$ 9,318	\$ 3,990
Service revenue	2,177	1,069	(1,108)
Total revenue	7,505	10,387	2,882
Cost of product revenue	2,803	4,866	2,063
Cost of service revenue	455	108	(347)
Gross profit	4,247	5,413	1,166
Operating expenses:			
Research and development expenses	10,134	11,157	1,023
General and administrative expenses	4,806	8,023	3,217
Sales and marketing expenses	7,559	13,511	5,952
Total operating expenses	22,499	32,691	10,192
Loss from operations	(18,252)	(27,278)	(9,026)
Other income and (expense):			
Grant income	4,226	4,117	(109)
Research and development tax credits	411	—	(411)
Change in fair value of warrants	(10)	(85)	(75)
Interest income	—	3	3
Interest expense	(1)	(21)	(20)
Net loss	\$ (13,626)	\$ (23,264)	\$ (9,638)

Revenue

Total revenue increased \$2.9 million in 2020 compared to the prior year. This consisted of an increase of \$2.6 million for instruments and \$1.4 million for consumables, partially offset by a \$1.1 million decrease for service revenue.

The increase in instruments revenue in 2020 was driven by an increase in unit sales generated from a larger commercial team, primarily hired in 2020 and new executive leadership with the addition of our Chief Commercial Officer in the second quarter of 2020. The increase in consumable revenue in 2020 was driven by an increase in the number of units at customer locations. Service revenue decreased in 2020 primarily as we advanced existing projects at a faster rate than we added new ones to our pipeline.

Gross Profit

Gross profit as a percentage of total revenues was 57% in 2019 compared to 52% in 2020. The decrease was driven primarily by a shift in our revenue mix and decreased service revenue, which generate higher margins. Production costs increased as we expanded capacity to plan for future growth. In addition, we experienced inefficiencies attributable to the launch of new products as well as the COVID-19 pandemic.

Research and Development Expenses

(in thousands)	Years ended December 31,		Period to period change
	2019	2020	
Compensation related expenses	\$ 4,581	\$ 5,742	\$ 1,161
Professional fees and sub-contractor	2,064	475	(1,589)
Prototyping	650	1,455	805
Recruiting	131	32	(99)
Lab materials	44	522	478
Supplies expense	2,118	2,215	97
Depreciation and amortization	167	287	120
Other	379	429	50
Total	\$ 10,134	\$ 11,157	\$ 1,023

Research and development expenses increased by \$1.0 million, or 10%, for the year ended December 31 2020 compared to the prior year, primarily due to increases in compensation related expenses of \$1.2 million, a \$0.8 million increase in prototyping, \$0.5 million of which related to a new product, our IsoSpark instrument, released in March 2021, an increase of \$0.5 million in lab materials used, and an increase of \$0.1 million of depreciation and amortization. These increases were partially offset by a \$1.6 million decrease in professional and sub-contractor fees. Our increased headcount in 2020 partially reduced the need for outside labor. In addition, the cost of outside labor was considerably higher in 2019 as a result of project timing.

General and Administrative Expenses

General and administrative expenses increased by \$3.2 million, or 67%, for the year ended December 31, 2020 compared to the prior year, primarily due to increases in compensation related expenses of \$2.8 million, including increased salary, bonus, benefits, and non-cash stock-based compensation, for additional personnel due to an increase in headcount from 24 at December 31, 2019 to 44 at December 31, 2020, including several executives, to support increased activities, an increase of \$0.2 million of professional fees, including legal, consulting, accounting, audit and recruiting expenses, an increase in state sales and use tax of \$0.1 million, and an increase in depreciation, amortization, office and facility expenses of \$0.1 million. A large portion of our headcount increase at the executive level occurred in the second half of 2019.

Sales and Marketing Expenses

Sales and marketing expenses increased by \$6.0 million, or 79%, for the year ended December 31, 2020, compared to the prior year, primarily due to increases in compensation related expenses of \$2.8 million, including increased salary, bonus, benefits, non-cash stock-based compensation, for additional personnel due to an increase in headcount from 30 at December 31, 2019 to 94 at December 31, 2020 to support increased activities, advertising and promotion expenses of \$1.5 million, consulting and subcontractor fees of \$1.0 million, sales commissions of \$0.6 million, recruiting fees of \$0.5 million, and various other selling expenses of \$0.4 million, partially offset by a decrease in travel and entertainment of \$0.8 million resulting from the COVID-19 pandemic. Overall, the increase was driven by the increase in headcount to support our growth mission and the hiring of consultants to help us identify and expand into new markets, including worldwide markets. The majority of the headcount increase for sales and marketing occurred in the fourth quarter of 2020.

Research and Development Tax Credits

We recognized \$0.4 million of research and development tax credits in 2019 under the Connecticut R&D Tax Credit Exchange Program. The credit is incremental in nature and focuses on increasing research activities or costs. Given the small increase in overall R&D spend in 2020 we do not anticipate there being a significant available benefit in 2020. Therefore, we recognized no income related to research and development tax credits in 2020.

Liquidity and Capital Resources

At March 31, 2021, we had \$101.4 million in cash. Cash as of March 31, 2021 decreased by \$5.2 million compared to December 31, 2020, primarily due to the factors described under the heading “—Cash Flows” below. Our primary source of liquidity, other than cash on hand, has been cash flows from issuances of preferred stock, debt financings and, to a lesser extent, grant income.

Cash Flows

The following table provides information regarding our cash flows for the three months ended March 31, 2020 and 2021:

(in thousands)	Three months ended March 31,	
	2020	2021
Net cash provided by (used in):		
Operating activities	\$ (5,851)	\$ (14,427)
Investing activities	(1,039)	(82)
Financing activities	5,000	10,000
Net increase in cash	\$ (1,890)	\$ (5,249)

Operating Activities

Net cash used by operating activities in the three months ended March 31, 2020 primarily consisted of net loss of \$(5.9) million, partially offset by net non-cash adjustments of \$0.3 million, plus net changes in operating assets and liabilities of \$(0.3) million. The primary non-cash adjustment to net income was depreciation and amortization costs of \$0.2 million. Cash flow impact from changes in net operating assets and liabilities were primarily driven by increases in accounts receivable and other assets, partially offset by increases in accounts payable and accrued liabilities, and decreases in inventories and prepaid expenses and other current assets.

Net cash used by operating activities in the three months ended March 31, 2021 primarily consisted of net loss of \$(15.6) million, partially offset by net non-cash adjustments of \$2.4 million, plus net changes in operating assets and liabilities of \$(1.6) million. The primary non-cash adjustments to net income included share-based compensation of \$0.1 million, depreciation and amortization expenses of \$0.3 million, change in fair value of warrants and loan commitment of \$1.9 million, amortization of debt discount of \$0.2 million and provision for warranty costs of \$0.1 million. Cash flow impact from changes in net operating assets and liabilities were primarily driven by an increase in account receivables, inventories and prepaid expenses and other current assets and partially offset by increases in accounts payable and accrued liabilities and deferred revenue.

Investing Activities

Net cash used in investing activities totaled \$1.0 million in the three months ended March 31, 2020. We purchased \$0.4 million of property and equipment. We paid \$0.1 million related to patent costs that were capitalized. We also purchased licenses for \$0.5 million.

Net cash used in investing activities totaled \$0.8 million in three months ended March 31, 2021. We purchased \$0.7 million of property and equipment. We paid \$0.1 million related to patent costs that were capitalized.

Financing Activities

Net cash provided by financing activities was \$5.0 million in the three months ended March 31, 2020. We raised cash through the issuance of Series C-2 redeemable convertible preferred stock, with net proceeds of \$5.0 million.

Net cash provided by financing activities was \$10.0 million in the three months ended March 31, 2021. We raised cash through the issuance of Series D redeemable convertible preferred stock, with net proceeds of \$10.0 million.

The following table provides information regarding our cash flows for the years ended December 31, 2019 and 2020:

	Year ended December 31,	
	2019	2020
	(in thousands)	
Net cash provided by (used in):		
Operating activities	\$ (14,958)	\$ (22,434)
Investing activities	(2,178)	(2,295)
Financing activities	22,481	103,999
Net increase in cash	\$ 5,345	\$ 79,270

Operating Activities

Net cash used by operating activities in 2019 primarily consisted of net loss of \$(13.6) million, partially offset by net non-cash adjustments of \$0.9 million, plus net changes in operating assets and liabilities of \$(2.2) million. The primary non-cash adjustments to net income included share-based compensation of \$0.1 million, depreciation and amortization expenses of \$0.5 million, and provision for warranty costs of \$0.1 million. Cash flow impact from changes in net operating assets and liabilities were primarily driven by increases in accounts receivable, inventories and other assets, partially offset by increases in accounts payable and accrued liabilities, and a decrease in grants receivable.

Net cash used by operating activities in 2020 primarily consisted of net loss of \$(23.3) million, partially offset by net non-cash adjustments of \$1.6 million, plus net changes in operating assets and liabilities of \$(0.7) million. The primary non-cash adjustments to net income included share-based compensation of \$0.5 million, depreciation and amortization expenses of \$0.9 million, change in fair value of warrants of \$0.1 million, and provision for warranty costs of \$0.1 million. Cash flow impact from changes in net operating assets and liabilities were primarily driven by an increase in inventories and prepaid expenses and other current assets and partially offset by increases in accounts payable and accrued liabilities.

Investing Activities

Net cash used in investing activities totaled \$2.2 million in 2019. We purchased \$1.8 million of property and equipment. We paid \$0.3 million related to patent costs that were capitalized. We also purchased licenses for \$0.1 million.

Net cash used in investing activities totaled \$2.3 million in 2020. We purchased \$1.5 million of property and equipment. We paid \$0.3 million related to patent costs that were capitalized. We also purchased licenses for \$0.5 million.

Financing Activities

Net cash provided by financing activities was \$22.5 million in 2019. We raised cash through the issuance of Series C and Series C-2 redeemable convertible preferred stock, with net proceeds of \$22.5 million.

Net cash provided by financing activities was \$104.0 million in 2020. We raised cash through the issuance of Series C-2 and Series D redeemable convertible preferred stock, with net proceeds of \$79.9 million. In addition, we received \$24.1 million in net proceeds under the Credit Agreement.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue our research and development efforts and expand our business efforts. Furthermore, following the completion of this offering, we expect to incur additional costs as a result of being a public company. Accordingly, we will need to obtain additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

We believe that the anticipated net proceeds from this offering, together with our existing cash as of March 31, 2021, will enable us to fund our operating expenses and capital expenditure requirements into the second half of 2024.

We have based our projections of operating capital requirements on assumptions that may prove to be incorrect and we may use all of our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with our research and development efforts, we are unable to estimate the exact amount of our operating capital requirements. Our future capital requirements will depend on many factors, including:

- future research and development efforts;
- the need to service and refinance our indebtedness;
- our ability to enter into and terms and timing of any collaborations, licensing agreements or other arrangements;
- the costs of sales, marketing, distribution and manufacturing efforts;
- our headcount growth and associated costs as we expand our business;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims; and
- the costs of operating as a public company

Until such time, if ever, as we can generate positive cash flows from operations, we expect to finance our cash needs through a combination of equity offerings, debt financings, and, to a lesser extent, grants. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of those securities may include liquidation or other preferences that adversely affect your rights as a holder of common stock. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or future revenue streams or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity offerings, debt financings or grants when needed, we may be required to delay, limit, or reduce our expansion efforts.

Contractual Obligations and Commitments

Contractual obligations represent future cash commitments and liabilities under agreements with third parties and exclude orders for goods and services entered into in the normal course of business that are not enforceable or legally binding.

On December 30, 2020, we entered into the Credit Agreement, which provides for senior secured financing of up to \$50.0 million, consisting of a \$25.0 million Tranche A term loan and a \$25.0 million Tranche B term loan. The Tranche A term loan of \$25.0 million was drawn at the initial closing of the Credit Agreement on December 30, 2020. The Credit Agreement was amended on May 27, 2021 to split the previously remaining \$25.0 million delayed draw term loan commitments under the Credit Agreement into a \$10.0 million Tranche B term loan and a \$15.0 million Tranche C term loan. The Tranche B term loan of \$10.0 million was drawn on May 27, 2021. Our ability to draw the \$15.0 million Tranche C term loan remains available through March 31, 2022 subject to several conditions, including achieving total revenue of at least \$20.0 million for the twelve month period then most recently ended. Borrowings under the Credit Agreement bears interest at a rate per annum equal to the one-month LIBOR rate (with a minimum LIBOR rate for such purposes of 1.75%) plus a margin of 9.50% (11.25% at December 31, 2020). Monthly payments of interest only are due over the term of the Credit Agreement with no scheduled loan amortization. Unless accelerated prior to such date, all amounts outstanding under the Credit Agreement are due to be repaid on December 30, 2025.

We have multiple operating lease commitments for office and manufacturing space and equipment, which expire through 2026. The future rental payments required to be made by us under such operating leases are approximately \$876,000 for the remainder of 2021, \$1,022,000 in 2022, \$941,000 in 2023, \$871,000 in 2024, \$716,000 in 2025 and \$292,000 thereafter.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Management bases its estimates on historical experience, market and other conditions, and various other assumptions it believes to be reasonable. Although these estimates are based on management's best knowledge of current events and actions that may impact us in the future, the estimation process is, by its nature, uncertain given that estimates depend on events over which we may not have control. Though the impact of the COVID-19 pandemic to our business and operating results presents additional uncertainty, we continue to use the best information available to inform our critical accounting estimates. If market and other conditions change from those that we anticipate, our consolidated financial statements may be materially affected. In addition, if our assumptions change, we may need to revise our estimates, or take other corrective actions, either of which may also have a material effect on our consolidated financial statements.

While our significant accounting policies are described in more detail in the notes to our financial statements appearing elsewhere in this prospectus, we believe that the following critical accounting policies and estimates have a higher degree of inherent uncertainty and require our most significant judgments.

Revenue Recognition

Our revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and chip consumables. Service revenue primarily consists of revenue generated from measuring immune responses using the Company's technology.

The Company recognizes revenue when control of products and services is transferred to customers in an amount that reflects the consideration the Company expects to receive from the customers in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the contract price, allocating the contract prices to distinct performance obligations in the contract, and recognizing revenue when the performance obligations have been satisfied. Revenue recognition for contracts with multiple deliverables is based on the separate satisfaction of each distinct performance obligation within the contract. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. The Company considers a performance obligation satisfied once the Company has transferred control of a good or service to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. The contract price is allocated to each performance

obligation in proportion to its standalone selling price. If the product or service has no history of sales or if the sales volume is not sufficient, the Company relies upon prices set by management, adjusted for applicable discounts.

The Company records revenue from product sales when performance obligations under the terms of a contract with customers are satisfied. Generally, this occurs with the transfer of control of the goods to customers at the time of shipment. The Company also generates service revenues by measuring immune responses using the Company's technology. The Company recognizes service revenue when performance obligations under the terms of a contract with customers are satisfied, which is generally at the time the analysis data is made available to the customer or agreed-upon milestones are reached. The Company makes judgments as to its ability to collect outstanding receivables and provides allowances when collection becomes doubtful.

Revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities. Employee sales commissions are recorded as sales and marketing expenses when incurred as the amortization period for such costs, if capitalized, would have been one year or less.

Share-Based Compensation

Our determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option pricing model, and is impacted by our common stock price as well as other variables including, but not limited to, expected term that options will remain outstanding, expected common stock price volatility over the term of the option awards, risk-free interest rates and expected dividends.

The fair value of a stock-based award is recognized over the period during which an optionee is required to provide services in exchange for the option award, known as the requisite service period (usually the vesting period) on a straight-line basis. Stock-based compensation expense is recognized based on the fair value determined on the date of grant and is reduced for forfeitures as they occur. Estimating the fair value of equity-settled awards as of the grant date using valuation models, such as the Black-Scholes option pricing model, is affected by assumptions regarding a number of complex variables. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require significant analysis and judgment to develop.

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of each option grant, with input from management, considering our most recently available third-party valuations of common stock, and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the *American Institute of Certified Public Accountants' Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Our common stock valuations were prepared using an option pricing method ("OPM"), which used market approaches to estimate our enterprise value. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceeded the value of the preferred stock liquidation preferences at the time of the liquidity event, such as a strategic sale or a merger. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. In addition to considering the results of these third-party valuations, our board of directors considered both objective and subjective factors, including:

- the prices at which we sold our redeemable convertible preferred stock and the superior rights and preferences of the redeemable convertible preferred stock relative to our common stock at the time of each grant;
- the progress of our research and development;
- our stage of development and our business strategy;

- external market conditions affecting the biotechnology industry, and trends within the biotechnology industry;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our redeemable convertible preferred stock; and
- the likelihood of achieving a liquidity event, such as an initial public offering or a sale of our company in light of prevailing market conditions.

The following table presents the grant dates of shares subject to awards from January 1, 2019 through the date of this prospectus, along with the corresponding exercise price for each option grant and our estimate of the fair value per share of our common stock on each grant date, which we utilized to calculate stock-based compensation expense:

Date of grant	Number of shares subject to award	Exercise price	Fair value of common stock at grant date	Per share estimated fair value of award ⁽¹⁾
March 13, 2019	6,300	\$ 7.70	\$ 7.70 ⁽²⁾	\$ 4.01
June 12, 2019	8,100	7.70	7.70 ⁽²⁾	4.01
December 4, 2019	30,150	8.22	8.22 ⁽³⁾	4.28
March 10, 2020	8,000	8.22	8.22 ⁽³⁾	4.07
April 6, 2020	600	8.22	8.22 ⁽³⁾	4.07
April 15, 2020	85,000	8.22	8.22 ⁽³⁾	4.07
June 10, 2020	14,150	8.22	12.00 ⁽⁴⁾	7.08
September 2, 2020	8,200	8.22	12.00 ⁽⁴⁾	7.08
February 15, 2021	46,700	14.64	31.68 ⁽⁵⁾	21.88
March 12, 2021	2,025	14.64	39.41 ⁽⁶⁾	29.21
April 21, 2021	5,000	14.64	39.41 ⁽⁶⁾	29.21
June 8, 2021	152,875	38.48	⁽⁷⁾	

(1) The per share estimated fair value of award reflects the fair value of options estimated at the date of grant using the Black-Scholes option-price model.

(2) The fair value of common stock used for financial reporting purposes for the March 13, 2019 and June 12, 2019 options were determined based on a fair value assessment as of December 1, 2018.

(3) The fair value of common stock used for financial reporting purposes for the December 4, 2019, March 10, 2020, April 6, 2020, and April 15, 2020 options were determined based on a fair value assessment as of December 1, 2019.

(4) The fair value of common stock used for financial reporting purposes for the June 10, 2020 and September 2, 2020 options were determined based on an average of the fair value assessments as of December 1, 2020 and 2019.

(5) The fair value of common stock used for financial reporting purposes for the February 15, 2021 options were determined based on an interpolation of the fair value assessments as of December 1, 2020 and March 31, 2021.

(6) The fair value of common stock used for financial reporting purposes for the March 12, 2021 and April 21, 2021 options were determined based on the fair value assessment as of March 31, 2021.

(7) The fair value of common stock used for financial reporting purposes for the June 8, 2021 options was determined based on the fair value assessment as of

Expected Term—We have opted to use the “simplified method” for estimating the expected term of options, whereby the expected term equals the arithmetic average of the vesting term and the original contractual term of the option (10 years).

Expected Volatility—Due to our limited operating history and a lack of company specific historical and implied volatility data, we have based our estimate of expected volatility on the historical volatility of a group of similar

companies that are publicly traded. The historical volatility data was computed using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of the stock-based awards.

Risk-Free Interest Rate—The risk-free rate assumption is based on the U.S. Treasury instruments with maturities similar to the expected term of our stock options.

Expected Dividend—We have not issued any dividends in our history and do not expect to issue dividends over the life of the options and therefore have estimated the dividend yield to be zero.

The assumptions underlying these valuations represented management's best estimate, which involved inherent uncertainties and the application of management's judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could have been materially different. We will continue to use judgment in evaluating the expected volatility, expected terms and interest rates utilized for our stock-based compensation expense calculations on a prospective basis.

Estimates of the fair value of common stock will not be necessary to determine the fair value of new awards once the underlying shares begin trading publicly.

Valuation of warrants

We have issued warrants exercisable into Series A-2 redeemable convertible preferred stock and Series D redeemable convertible preferred stock in connection with debt issuances. These warrants are classified as liabilities on our consolidated balance sheets as we determined that they meet the definition of a freestanding financial instrument since they are legally detachable and also determined that such instruments represent forward sale contracts on redeemable shares and, accordingly, the instruments should be accounted for as a liability separate from the redeemable convertible preferred stock. They are reported at fair value at inception with an allocation of the proceeds from the debt issued. We remeasure these liabilities to fair value at each reporting date, and immediately prior to exercise or settlement, and recognize changes in the fair value of the liabilities in our consolidated statements of operations recorded as "change in fair value of warrants." The Series A-2 Preferred Stock Warrant was exercised on May 11, 2021, at an exercise price of \$12.58608 per share for 3,178 shares of Series A-2 redeemable convertible preferred stock.

The fair value of the liabilities was determined using a Black-Scholes option pricing model, which considered inputs including, but not limited to, exercise price, estimated fair value of the applicable redeemable convertible preferred stock, volatility, expected term, and risk-free interest rate.

Recent Accounting Pronouncements

Refer to Note 2, "Summary of Significant Accounting Policies," in the accompanying notes to the consolidated financial statements for a discussion of recent accounting pronouncements.

Qualitative and Quantitative Disclosures about Market Risk

We are exposed to market risk related to changes in interest rates. As of March 31, 2021, we had cash of \$101.4 million. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of interest rates. As of March 31, 2021, our cash is held primarily in savings and checking accounts. Because of the short-term nature of the instruments in our portfolio, an immediate 10% change in the interest rate would not have a material impact on the fair market value of our investment portfolio or on our financial position or results of operations.

The JOBS Act

The JOBS Act permits an emerging growth company such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, we will not be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies until such time that we either (i) irrevocably elect to "opt

out” of such extended transition period or (ii) no longer qualify as an emerging growth company. See “Prospectus Summary—Implications of Being an Emerging Growth Company.”

We are also a smaller reporting company meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than \$700.0 million and our annual revenue was less than \$100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our stock held by non-affiliates is less than \$250.0 million or (ii) our annual revenue was less than \$100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700.0 million. To the extent we continue to qualify as a smaller reporting company after we cease to qualify as an emerging growth company, we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the SEC. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

BUSINESS

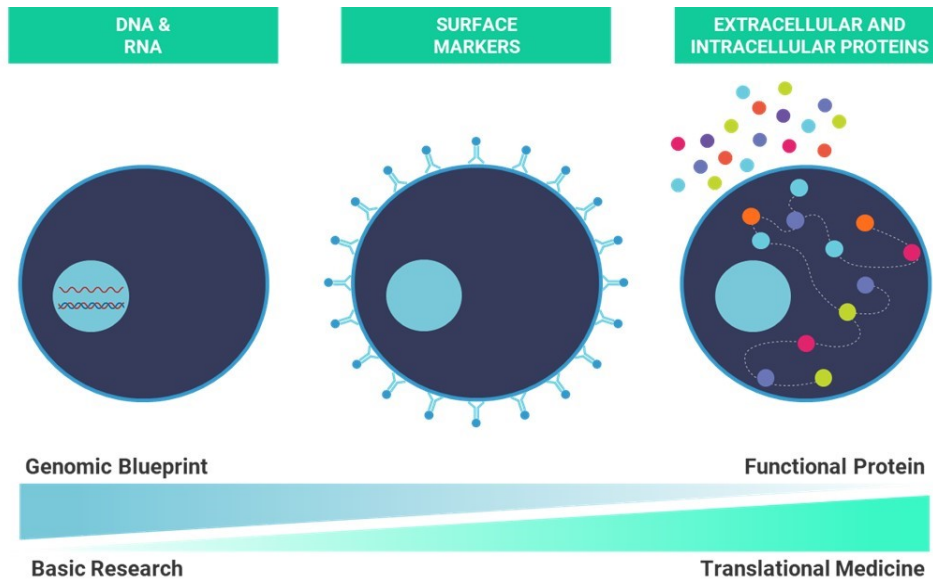
Overview

We are enabling deeper access to *in vivo* biology and driving durable and potentially transformational research on disease in a new era of advanced medicine. We believe our platform is the first to employ both proteomics, or the study of proteins and their functions, and single cell biology in an effort to fully characterize and link cellular function to patient outcomes by revealing treatment response and disease progression. Our single cell proteomics platform, which includes instruments, chip consumables and software, provides an end-to-end solution to reveal a more complete view of protein function at an individual cellular level. Since our commercial launch in June of 2018, our platform has been adopted by the top 15 global biopharmaceutical companies by revenue and nearly half of the comprehensive cancer centers in the United States to help develop more durable therapeutics, overcome therapeutic resistance, and predict patient responses for advanced immunotherapies, cell therapies, gene therapies, vaccines, and regenerative medicines. Our initial focus has been on developing applications of our platform for cancer immunology and cell and gene therapy. We are now expanding our capabilities to include applications for infectious diseases, inflammatory conditions, and neurological diseases.

We believe that traditional bulk methods of proteomics analysis, which analyze proteins in bulk samples made up of many different types of cells, lack quality single cell resolution. Single cell biology has become highly valuable to the life sciences industry because individual core cell types underlying a specific disease (for example, tumor cells, immune cells, and cells of the central nervous system) look and act very differently. Single cell biology provides deep insights into variations among each individual cell's behavior, such as underlying disease activity and therapeutic response. Traditional bulk proteomic analyses fail to provide these insights as they focus on average cell activity in the aggregate. For example, in cell therapy, where heterogeneous populations of immune cells are engineered to combat tumors, traditional bulk proteomic methods are not designed to identify the unique immune cell subsets that contribute most significantly to effective treatment responses. At the same time, while the genome of single cells has been explored in depth, genomics has limitations on accurately predicting treatment resistance, which often results from tumor protein signaling adaptations rather than genetic aberrations. In oncology, while genomics has been used to reveal mutations that reside along druggable pathways, therapeutics targeting these pathways have only marginally improved patient outcomes, with almost universal and rapid development of drug resistance. We believe that our platform can capture a more complete view of the functional biological drivers of disease and therapeutic response.

We designed our platform to reveal functional protein biology and cellular signaling networks at single cell resolution to accelerate the development of advanced medicines. The drivers of efficacy and toxicity are heavily impacted by cytokines, or extracellular functional proteins, through which certain individual cells send and receive signals. Additionally, disease progression and treatment resistance are heavily impacted by the intracellular signaling proteins, in particular phosphoproteins, which dictate the functional state of any cell. We believe that directly capturing the full range of intracellular and extracellular functional proteins is critical to analyzing the efficacy of therapies, identifying biomarkers suitable for druggable targets, and modifying therapeutics that are not generating the intended result. In contrast to traditional bulk methods of proteomics, which can only produce estimates of aggregated levels of functional proteins, our technology fills a critical knowledge gap by directly detecting the full range of intracellular and extracellular functional proteins within a sample.

Figure 1. The figure below represents the evolution of single cell biology from the study of the genomic blueprint of a cell—its DNA and RNA—through the functional representation of each cell’s activity—its extracellular and intracellular proteins. This evolution towards the proteome is enabling greater application to translational medicine.



Our platform is an end-to-end solution comprised of our proprietary IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software. Our IsoLight and IsoSpark instruments are designed to be fully-automated benchtop proteomic hubs. Our IsoCode chips utilize our core technology leveraging our proteomic barcoding to capture single cell protein information. Our recently introduced CodePlex chips leverage our core technology to assay multiplexed bulk proteins from very low volumes. Our IsoSpeak software interprets this data and is capable of rapidly returning comprehensive data figures in a format that would be suitable for inclusion in a research publication submission and is also capable of producing advanced visualizations to reveal key insights. We believe that our platform overcomes many of the limitations of traditional bulk proteomic workflows, which can be capital intensive, time consuming and laborious, require multiple instruments and many manual steps, and may only be capable of analyzing small numbers of functional proteins at a time. Our platform supports multiple applications, including in cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases.

Figure 2. Our platform is comprised of instruments, chip consumables, and software.



IsoCode and CodePlex Chip Technology Overview

<i>Chip Solutions</i>	<i>Function</i>	<i>Applications</i>
Extracellular Protein Detection	Enables the discovery of better biomarkers, including rare cells that have the potential to drive therapeutic persistence, potency, and durability	Translational medicine <ul style="list-style-type: none"> • Cancer immunology • Inflammation • Cell therapies • Infectious disease • Targeted therapies
Intracellular Protein Detection	Measures cellular protein-to-protein interactions and adaptive resistance pathways to identify resistance earlier and enable earlier selection of potential treatments	Discovery <ul style="list-style-type: none"> • Combinatorial therapies • Kinase inhibitors • Targeted therapies • Cell therapies

Our current product offering supports a variety of applications that are broadly used for translational, preclinical and clinical development of advanced medicines, representing an initial \$12 billion addressable market opportunity based on management estimates. This cumulative market spend accounts for an installed base of approximately 55,000 instruments, in line with mature protein and cell biology technologies such as flow cytometry and multiplexed proteomics. Our relevant end users span the range of biopharmaceutical companies and academic and research institutions worldwide, which in the aggregate cover approximately 5,500 advanced medicines programs in both preclinical and clinical stages. In addition to our currently targeted addressable market opportunity in advanced medicines, we have recently expanded our capabilities with intracellular protein detection IsoCode chip products, which are designed to improve discovery biology as a bridge to the earlier development of advanced medicines. We believe this represents an incremental \$12 billion addressable market opportunity. Expanding our chip solution portfolio is a key factor in enabling us to expand our capabilities into applications for infectious diseases, inflammatory conditions, and neurological diseases.

As of March 31, 2021, we have placed 129 systems globally, including at each of the top 15 global biopharmaceutical companies by revenue and nearly half of the comprehensive cancer centers in the United States. As of March 31, 2021, we employed a commercial team of approximately 135 team members. We market and sell our platform, which is currently marketed to customers as research use only, through a direct sales channel in North America and specific regions in Europe. Additionally, we utilize ten distributor relationships to market and sell our products in Europe, the Middle East and Asia-Pacific.

Our revenue to date has been driven primarily by sales of our instruments and chip consumables. Revenue for the fiscal years ended December 31, 2019 and 2020, was \$7.5 million and \$10.4 million, respectively, and revenue for the three months ended March 31, 2020 and 2021 was \$1.6 million and \$3.2 million, respectively. For the three

months ended March 31, 2021, our sales to end-markets of biopharmaceutical companies and academic and research institutions represented approximately 70% and 30% of our total sales, respectively. We generated net losses of \$13.6 million and \$23.3 million for the fiscal years ended December 31, 2019 and 2020, respectively, and net losses of \$5.9 million and \$15.6 million for the three months ended March 31, 2020 and 2021, respectively.

The IsoPlexis Advantage

We designed our platform to reveal functional protein biology and cellular signaling networks at single cell resolution to accelerate the development of advanced medicines and improve patient outcomes by revealing treatment response and disease progression. Use of our platform has generated approximately 55 predictive data sets and our technology has been referenced in approximately 81 publications. We believe that our platform offers several advantages over existing proteomic and cellular analysis technologies, including:

Direct single cell analysis of functional proteins: We designed our platform to directly measure the functional proteins from each cell in a highly multiplexed manner. For example, our platform is capable of directly measuring the proteomic activity of each immune cell—such as T cells, macrophages, or NK cells—providing highly correlative clinical and preclinical immune biomarkers. In contrast, while technologies such as RNA sequencing provide information useful for estimating cellular protein function, the correlation between such information and functional proteins is relatively low, making it difficult to translate the information from these technologies into insights for therapeutic applications. Similarly, flow cytometry cannot detect the highly multiplexed extracellular functional proteins from each cell that may directly correlate to *in vivo* response.

Multiple proteomic applications on a single system: We designed our technology to provide highly multiplexed information from bulk and single cell extracellular proteome and the intracellular proteome, all on the same system. Our approach, which leverages a single system, is designed to increase efficiency and accessibility across many areas of advanced cellular analysis for a wide range of applications.

Rapid data analysis and insights: Gathering insights from current single cell technologies can take months due to the limitations of current solutions in collecting and analyzing data. Our IsoSpeak software provides advanced automated data analysis with a push button user interface that can be run with limited technological expertise, and is capable of generating insights and comprehensive data figures within hours, that are in a format that would be suitable for inclusion in a research publication submission. By streamlining and accelerating the data collection process, we believe our platform could potentially help our customers shorten drug development timelines.

Ultra-low sample volume requirements: Many traditional bulk proteomic workflows require relatively large sample volume, which can be a challenge for customers since samples are often very limited. We designed our platform to maximize the utility of the limited sample volume that our customers obtain from their clinical trials. Our IsoCode and CodePlex chip consumables require sample volumes as small as 11 μ L, allowing for multiplexed analysis of samples that are difficult to obtain such as cerebrospinal fluid and tracheal samples.

Simplified workflow and minimal footprint: Many traditional bulk proteomic workflows and single cell workflows are laborious and time consuming, requiring many manual steps across multiple instruments. After a sample is loaded onto one of our chips, which is then inserted into our IsoLight or IsoSpark instrument, our platform automates all protein detection steps in a walk away fashion, saving time and laboratory resources. Our automated ELISA, or a standard immunoassay, workflow reduces the need for specialized technicians to run experiments or interpret results and reduces overhead. Without our platform, similar workflows would require multiple instruments that would occupy a substantially larger combined footprint compared to the benchtop placement of our instruments, which have a total footprint of 28.5 inches (in the case of the IsoLight) or 18 inches (in the case of the IsoSpark). We believe ease of use of our fully-automated benchtop instruments, combined with their minimal footprint, drives customers to adopt our platform at a lower system and labor cost.

Our Platform

Our platform is an end-to-end solution comprised of our proprietary IsoLight and IsoSpark instruments, IsoCode and CodePlex chip consumables, and IsoSpeak software, spanning multiple applications. Once a sample is loaded onto our proprietary “proteomic barcoded” IsoCode or CodePlex chips, highly sensitive software-enabled

optics quantify the proteins associated with each single cell through individualized antibody-based proteomic reactions.

Our platform leverages a series of chambers that capture single cells, where each separate chamber enables multiplexed protein detection reactions simultaneously, or in a parallelized fashion. The highly multiplexed number of functional proteins per cell quantified by our platform's proteomic barcoding has led to correlative insights in cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases.

Our Instruments

Our IsoLight and IsoSpark instruments, both Red Dot Design Award winners, run our IsoCode and CodePlex chips, enabling high-throughput analysis of functional proteins from single cells and low sample volume bulk with a fully-automated workflow. The IsoLight has a footprint of 28.5 inches while the IsoSpark is a compact 18 inches. Both instruments are comprised of four modules:

- an optical system to quantify protein concentrations;
- a fluidic system to enable the automated ELISA workflow that allows the user to insert samples and retrieve answers with limited hands on time;
- a mechanical system to enable analysis of eight samples in the IsoLight, or four samples in the IsoSpark, simultaneously; and
- a thermal system to provide for the incubation of single cells to capture their proteomic reactions.

Our Chip Consumables

IsoCode chips: Our highly multiplexed chip solutions for single cell functional proteomics

Our IsoCode single cell chip solutions provide highly multiplexed applications to capture the functional extracellular and intracellular proteome.

Our single cell extracellular protein detection chip solution, which we also refer to as our single cell extracellular proteome solution, works through a series of steps:

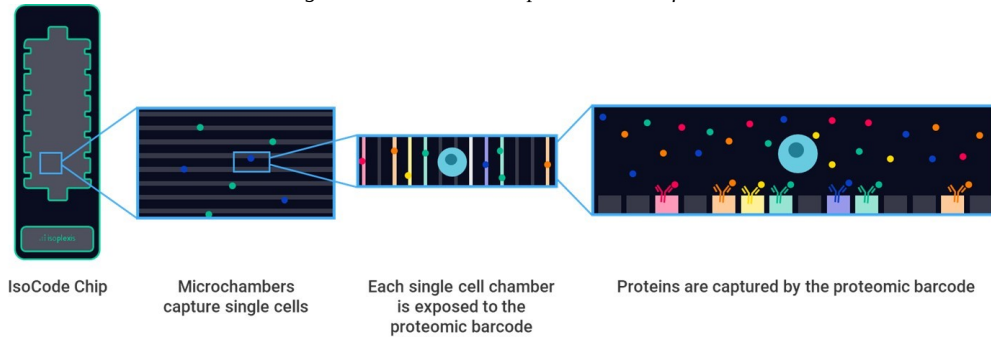
- first, the sample is prepared and retained in suspension;
- second, live cells are loaded onto the chip; and
- third, the live cells housed in the single cell chambers secrete their extracellular proteins, which are captured by our proteomic barcode.

Similarly, our single cell intracellular protein detection chip solution, which we also refer to as our single cell intracellular proteome solution, works through a series of similar steps:

- first, the sample is prepared and retained in suspension;
- second, live cells are loaded onto the chip; and
- third, these live cells are lysed within each single cell chamber to release their intracellular components, which are then captured by our proteomic barcode.

In each case, our IsoLight or IsoSpark then detects the concentration of these proteins per cell and determines the protein profile of each single cell.

Figure 3. The IsoCode chip solution workflow



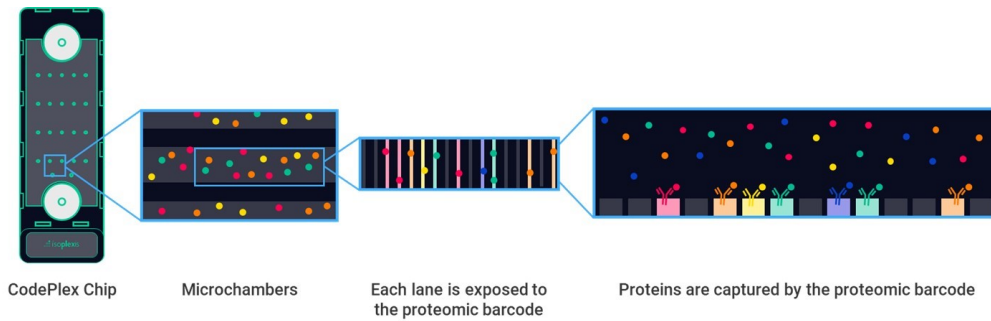
CodePlex chips: Our multiplexed solutions for ultra-low volume bulk samples

Our CodePlex chip solutions provide highly multiplexed applications to capture the functional extracellular and intracellular proteome from low volume of bulk protein samples, rather than from single cells. These extracellular and intracellular proteome solutions work through a series of steps:

- first, the protein sample is retained with minimal preparation or dilution;
- second, the protein sample is loaded into the chip through various ports to allow for multiple samples per chip; and
- third, each sample is retained in its respective chamber in which the proteins are captured by our proteomic barcode.

Our IsoLight or IsoSpark then detects the concentration of these proteins in bulk and determines the protein profile of each sample.

Figure 4. The CodePlex chip solution workflow



Our Software

Our IsoSpeak software, an Edison Award winner, takes complex high dimensional data and automates analysis with an intuitive push button user interface to deliver same day single cell and bulk proteome visualizations without the need for highly specialized informatics professionals. The software works by retaining the images of the proteins detected on the IsoLight or IsoSpark, analyzing the images for concentrations of those proteins using fluorescence and then converting the information into actionable insights through various data visualizations.

Our Services

In addition to selling our products, we leverage our platform to provide research support and services to our customers. We process samples from certain of our customers using our platform and return to these customers the immune response data generated from their samples. We also provide post-warranty services to our customers who have purchased our instruments.

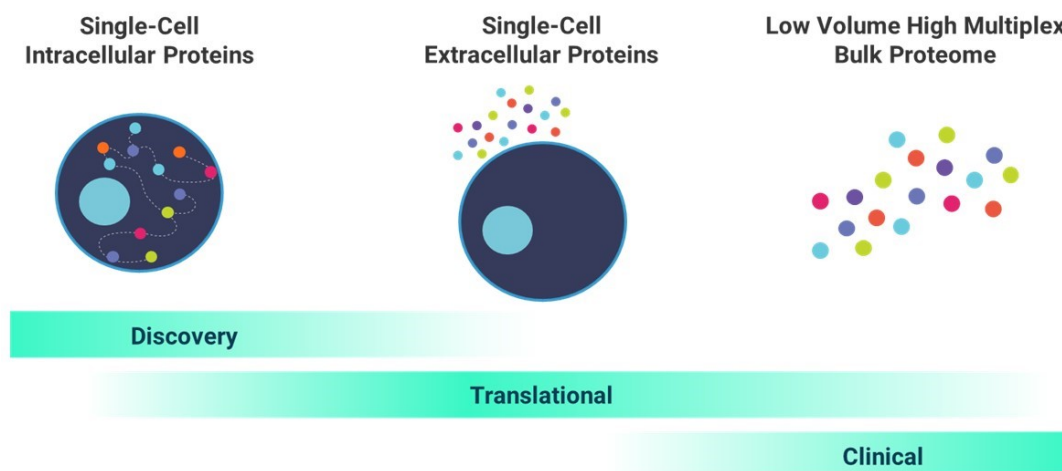
Our Applications across the Drug Development Continuum

Our IsoCode single cell extracellular proteome solution measures the extracellular functional proteins from each cell in a highly multiplexed manner, allowing for complete single cell functional characterization. This solution enables the comprehensive profiling of the extracellular function of a wide variety of immune cell types, resulting in the generation of correlative data sets in the fields of cancer immunology and cell and gene therapy, which have been our initial areas of focus. The differentiated information that has been obtained has been applied preclinically to evaluate immune and cell therapy candidates and processes. Additionally, it has generated key biomarkers of immune response in early clinical studies and forms the basis of our initial addressable market for advancing preclinical and clinical trials within advanced medicines. This chip solution has been leveraged by a number of high impact clinical studies published in reputable scientific journals such as *Cell* and *Blood*. See “—Customer Case Studies.”

Our IsoCode single cell intracellular proteome solution simultaneously measures multiple intracellular protein signaling networks at the single cell level, allowing for detection of critical protein-to-protein interactions and signaling networks in rare cells and cell subsets. These various protein signaling networks form the basis of both functional and dysfunctional activity in a wide variety of cell types. Our single cell intracellular proteome solution enables a better understanding of these signaling networks, which can then be applied to treat dysfunction in tumor cells and to facilitate activation of key immune cell types earlier in the therapeutic discovery process. The ability to target these signaling networks provides access to serve a discovery-focused market, enabling us to address opportunities in the fields of infectious diseases, inflammatory conditions, and neurological diseases.

Our CodePlex bulk extracellular proteome and intracellular proteome solutions provide means to achieve highly multiplexed, low sample volume proteomics. CodePlex requires up to 10 times less sample volume versus other comparable methods of analyses, opening up opportunities for precious sample analysis in preclinical and clinical studies. The CodePlex solution enables automated proteomic analyses on customers' benchtops within one IsoLight or IsoSpark system, eliminating the need for multi-instrument workflows that require technician expertise to run. Our CodePlex solution is used across multiple applications for assaying proteins from blood, cerebrospinal fluid, and tracheal samples in both preclinical and clinical studies in the fields of cancer immunology and cell and gene

therapy. Further, we expect that our initial entry into the clinical diagnostics market will start with our CodePlex solution as it provides accessibility to end users through automation.



Customer Case Studies

Each of the case studies described below leveraged our IsoCode single cell extracellular proteome solution by detecting immune cell protein responses within our IsoCode chip and detecting unique extracellular protein signatures from subsets of these immune cells that predicted or correlated with treatment response or disease progression. The unique extracellular protein signature in each case study was defined by the ability of the cells to produce multiple proteins simultaneously, which we refer to as a sample having polyfunctional strength, or PSI.

Earlier measurement of potential survival biomarker in a cancer clinical study for checkpoint inhibitors

In a 38 patient metastatic melanoma study sponsored by pharmaceutical companies including Nektar Therapeutics, where the patients underwent checkpoint inhibitor and IL-2 agonist therapy, our platform identified that a blood-based biomarker correlated with patient response and progression-free survival. PSI of CD8+ T cells was measured at day 8 and day 1 in the set of metastatic melanoma patients treated with NKTR-214 (Bempeg) plus Nivolumab. The researchers found that the PSI difference (PSI on Day 8 minus PSI on Day 1) predicted eventual response, based on progression-free survival, to the Bempeg/Nivolumab treatment in first line therapy. Using our platform, researchers were able to measure PSI in week 1, much earlier than using other methods.

Analyzing treatment response and product potency in a CAR-T cell therapy study

As published in *Blood*, in a 20 patient non-Hodgkin lymphoma study sponsored by Kite Pharma, researchers using our platform determined that the PSI of each CAR-T cell therapy product, prior to infusion, had a significant association with complete or partial patient response to anti-CD19 CAR-T therapy. Other pre-infusion metrics tested in this study using alternative methods were not predictive. Through this research, we were able to highlight the important role a functionally versatile subpopulation of CAR-T cells may play in the potency of anti-CD19 therapies. We believe product-based readouts like this one have the potential to enable more predictive and scalable manufacturing and product release of cell therapies globally.

Understanding progression of disease and inflammation to enable therapy development in a COVID-19 study

As published in *Cell*, in collaboration with Merck & Co. and the Institute for Systems Biology, researchers using our platform identified that the PSI of peripheral monocytes increased with COVID-19 severity, while CD4+ T cells, CD8+ T cells and NK cell percentages decreased, revealing which of these cells contributed to the pro-inflammatory environment in moderate to severe cases of COVID-19. Our platform's characterization of immune

biomarkers at each stage of COVID-19 progression is helping researchers to identify and develop treatments and critical prognostic biomarkers, based on functional profiles of critical subsets of immune cells.

Additional studies have shown correlations between biomarkers identified using our platform and the ability to predict responses across different types of immunotherapy studies.

Our Market Opportunity

Our current product offering supports a variety of applications which are broadly used for translational, preclinical and clinical development of advanced medicines, representing an initial \$12 billion addressable market opportunity based on management estimates. This cumulative market spend accounts for an installed base of approximately 55,000 instruments, in line with mature protein and cell biology technologies such as flow cytometry and multiplexed proteomics. Within this addressable market, our relevant end users span the range of biopharmaceutical companies and academic and research institutions worldwide, which cover approximately 5,500 advanced medicines programs in both preclinical and clinical stages.

In addition to our currently targeted addressable market opportunity in advanced medicines, we have recently expanded our capabilities with our intracellular protein detection IsoCode chip products, which are designed to improve discovery biology as a bridge to earlier development of advanced medicines. We believe this represents an incremental \$12 billion addressable market opportunity. Additionally, we are pursuing a range of integrated applications around sequencing and proteomic analytes from single cells, which will enable further applications for discovery biology. Expanding our chip solution portfolio is a key factor in enabling us to expand our capabilities into applications for infectious diseases, inflammatory conditions, and neurological diseases. Furthermore, our long term strategy is ultimately to add additional applications serving clinical diagnostics research that will allow us to serve additional markets we believe to be worth approximately \$10 billion. We expect that our initial entry into the clinical diagnostics market will start with our CodePlex solution for low volume bulk proteomics as it provides accessibility to end users through automation. We believe investments in these areas will provide access to a potential \$34 billion total addressable market.

Our Growth Strategy

Our goal is to establish our platform as a leading proteomic workflow solution in the life sciences industry. In pursuit of that goal, the key elements of our growth strategy include:

Promoting our platform as the standard for single cell proteomic analysis

We believe that our platform is a critical tool that provides new and accessible layers of biological data at the single cell level, and the ability to capture the functional extracellular and intracellular proteome from single cells for the first time. We believe that our platform is well positioned to fundamentally advance therapeutic discovery and development. We intend to continue promoting our instruments, chip consumables, and software to drive awareness of the broad utility of our platform for development of advanced medicines and the discovery of biomarkers.

Expand the installed base of our IsoLight and IsoSpark instruments with new and existing customers

As of March 31, 2021, we have placed 129 systems worldwide within leading biopharmaceutical companies and academic and research institutions in North America, Europe and Asia-Pacific. Utilizing our multi-channel sales and distribution network, we intend to continue engaging with the global life sciences community to grow our installed base and expand the number of instruments within organizations that are already utilizing our technology to advance their research and therapeutic development. Outside of North America, we intend to leverage our distributor partnerships across four continents to expand our presence, with an emphasis on the China market.

Drive adoption of our existing applications

We founded our company to help solve critical challenges to accelerating advanced medicines and since our inception, we have developed multiple applications spanning cancer immunology, cell and gene therapy, infectious diseases, inflammatory conditions, and neurological diseases. We intend to continue promoting our platform to help

meet the urgent need to develop new therapeutics and accelerate development timelines across these applications. We intend to continue promoting the discoveries and data published by our customers, which we believe will further reinforce the value of our platform and drive additional adoption of our platform for use across these applications.

Develop new applications across multiple therapeutic classes and indications

As we continue to deploy our platform, we intend to concurrently expand the breadth of applications for our technologies to encourage increased use of our platform across our addressable markets. At present, we believe we have the ability to reveal insights in functional proteomics in new therapeutic classes and indications, such as infectious diseases, inflammatory conditions, and neurological diseases. Our goal is to continue innovating and bringing new products to market as new areas of therapeutic development emerge.

Expand adoption of our platform into new geographical markets

We currently market and sell our technology with an in-house commercial team in the United States and Europe. We are also utilizing our distribution network to market and sell across multiple countries, including Australia, China, Italy, Israel, Japan, New Zealand, Portugal, Singapore, South Korea, Spain, and Switzerland. We intend to further expand our international presence by growing our distribution networks in Brazil, Canada, India, Mexico, Russia and beyond.

Integrate sequencing biology with proteomics

We intend to further develop our product roadmap to integrate sequencing and functional proteomic biology from single cells to enable novel applications in discovery biology. Currently, single cell solutions are limited in their ability to detect genomic and transcriptomic information and functional proteins concurrently from single cells. We believe that the ability to modulate and modify genomic activity in cells and detect genomic impacts can be enhanced by verifying the proteomic, or functional, impacts concurrently from the same cell. Our technology's ability to reveal this multi-omic connectivity across cellular pathways may be able to provide earlier therapeutic insights for developers of advanced medicines.

Our Commercial Organization

We launched our first product in June 2018 and have sold our products primarily to biopharmaceutical companies and academic and research institutions. Market adoption has accelerated since our initial commercial launch with 35 instruments sold in 2019 and 58 instruments in 2020, and as of March 31, 2021, we have sold a total of 129 systems. We have a global customer base with 98 systems placed in the United States, 14 in EMEA and 17 in Asia-Pacific, in each case as of March 31, 2021.

We continue to invest in our commercial team of approximately 135 people as of March 31, 2021, including approximately 30 sales representatives. We also intend to build a direct salesforce in China that leverages our distributor relationships and other third parties. Beyond our direct salesforce, we have relationships with ten distributors covering countries including Australia, China, Italy, Israel, Japan, New Zealand, Portugal, Singapore, South Korea, Spain, and Switzerland.

Continued investment in research and development is critical to the commercialization of our future products. Our deep product and application roadmap represents one of the key growth drivers of instrument and consumable sales. We intend to expand our intellectual property and research capabilities through internally developed efforts, in conjunction with strategic partners and by acquiring technology.

Our Product Development Approach

Our research and development teams, located in Branford, Connecticut, design and develop our proprietary products utilizing and combining expertise in single cell biology, fluidics, optics, informatics, hardware and software engineering. Our collaborative approach across disciplines helps lead to advancements in technology development

intended to provide clarity on new layers of complex biology to advance curative medicines. To complement our growth strategy, both in the near term and long term, we plan to focus our research and development on:

New applications

We intend to focus our research and development efforts on developing new high value, highly differentiated applications that unlock new proteomically driven biology and drive the future of disease understanding and development of advanced medicines. Our focus in the near term includes new applications for infectious diseases, inflammatory conditions, and neurological diseases.

New panels and protocols

We intend to focus on developing new panels, protocols, and analyte targets for each application family to cover the full range of our customers biological needs. Our research and development efforts in this area are centered on expanding our menu of test panels for single cell extracellular proteomics, single cell intracellular proteomics and low volume bulk proteomics to include, for example, tumor metabolome panels for single cell and low volume bulk analysis. Our focus in the near term also includes releasing protocols for additional types of immune cells, tumor cells and neural cells.

Integrating proteomics with sequencing-based technologies

We also intend to focus on integrating proteomics technologies with sequencing-based technologies to extend existing capacities in single cell biology. We believe that this integration will enable a better understanding of the connections between the genome, transcriptome and the proteome, and will have applications for cancer immunology, cell and gene therapy and neurological diseases.

Additionally, we also intend to focus on developing software that automates and streamlines advanced analytics, enabling immediate insights, and working with clinical partners to put in place validated tests that build a long-term path to clinical usage of our solutions.

Our research and development costs were \$10.1 million and \$11.2 million for the years ended December 31, 2019 and 2020, respectively, and \$3.1 million and \$3.7 million for the three months ended March 31, 2020 and 2021, respectively. As of March 31, 2021, we employed 83 employees in research and development. We will continue investing in efforts to support the ongoing development of our instruments, chip consumables and software, as well as enhance the overall performance of our solutions.

Employees

As of March 31, 2021, we employed 313 employees. Of these employees, 83 were engaged in research and development activities, and we employed a commercial team of approximately 135 team members. 288 of these employees are located in the United States and 25 of these employees are located across Europe and Asia. None of our employees are represented by a labor union or are party to a collective bargaining agreement, and we have had no labor-related work stoppages.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity incentive plans are to attract, retain and reward personnel through the granting of stock-based and compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Scientific Advisory Board

We have assembled a highly qualified scientific advisory board composed of advisors who have deep expertise in the fields of nanotechnology, biomedical engineering and medicine. Our scientific advisory board is composed of Rong Fan, Ph.D. (our co-founder and chair of the scientific advisory board), James R. Heath, Ph.D., David Ho, M.D., Arnold Levine, Ph.D., Ross Levine, M.D., and Antoni Ribas, M.D., Ph.D.

Facilities

Our principal executive offices are located in Branford, Connecticut, where we lease approximately 14,674 square feet of office and manufacturing space. The lease for our principal executive offices is currently scheduled to terminate on July 31, 2025. In addition to our principal executive offices, we lease additional offices and manufacturing space in Branford, Connecticut and additional offices in Campbell, California, Kent, England and Shanghai, China.

We do not currently own any real property. We believe that our current facilities are adequate to meet our immediate needs and believe that we should be able to renew each of our leases without an adverse impact on our operations. In addition, we believe that if we require additional office space or manufacturing facilities, we will be able to obtain additional facilities on commercially reasonable terms.

Competition

We face significant competition in the life sciences technology market. We currently compete with many established technology companies in the flow cytometry, cellular analysis and single cell -omics businesses. This includes companies that design, manufacture and market systems, consumables and software for, among other applications, genomics, transcriptomics, proteomics, metabolomics, single cell analysis and immunology, and/or provide services related to the same. These companies include Becton, Dickinson and Company, Thermo Fisher Scientific Inc. and Bio-Rad Laboratories, Inc., each of which has products that compete to varying degrees with some but not all of our products. Growing understanding of the importance of single cell information is leading to more companies offering services related to collecting such information. Our target customers may also elect to develop their workflows on legacy systems or using traditional methods, rather than implementing our platform, and they may also decide to stop using our platform. In addition, there are many large established players in the life sciences technology market that we do not currently compete with but that could develop systems, tools or other products that will compete with us in the future. These large established companies have substantially greater financial and other resources than us, including larger research and development staff or more established marketing and sales forces.

For further discussion of the risks we face relating to competition, see “Risk Factors—Risks Related to Our Business and Industry—*The life sciences technology market is highly competitive. If we fail to compete effectively, our business and results of operation will suffer.*”

Government Regulation

Our products are currently marketed (and we currently intend to continue to market them) as research use only (“RUO”) and we sell them to biopharmaceutical companies and academic and research institutions that conduct research. The FDA defines RUO products as in-vitro diagnostic tests (“IVDs”) that are in the laboratory research phase of development and, if properly labeled, the FDA exempts RUO products from most FDA regulatory controls. RUO products must bear the statement: “For Research Use Only. Not for Use in Diagnostic Procedures.” RUO products cannot make any claims related to safety, effectiveness or diagnostic utility and they cannot be intended for human clinical diagnostic use. The FDA will evaluate the totality of the circumstances when determining if the product is intended for diagnostic purposes and, if the FDA were to determine, based on the totality of circumstances, that our products labeled and marketed for RUO are intended for diagnostic purposes, they would be considered medical devices and would require clearance or approval prior to commercialization. The FDA defines a medical device as an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related article, including any component part or accessory, which is (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of disease, in man or other animals, or (ii) intended to affect the structure or any function of the body of man or other animals and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes. The development, testing, manufacturing, marketing, post-market surveillance, distribution, advertising and labeling of medical devices, which includes IVDs, are subject to regulation in the United States by the FDA under the Federal Food, Drug, and Cosmetic Act (“FDC Act”) and comparable state and international agencies. The FDA regulates,

among other things, the research, design, development, preclinical and clinical testing, manufacturing, safety, effectiveness, packaging, labeling, storage, recordkeeping, pre-market clearance or approval, adverse event reporting, marketing, promotion, sales, distribution and import and export of medical devices. To be commercially distributed in the United States, medical devices must receive from the FDA either clearance of a premarket notification, known as 510(k), or premarket approval pursuant to the FDC Act prior to marketing, unless subject to an exemption. Sales of devices for diagnostic purposes may also subject us to additional healthcare regulation. We continue to monitor the changing legal and regulatory landscape to ensure our compliance with any applicable rules, laws and regulations. For further discussion of the risks we face relating to regulation by the FDA and related regulatory agencies, see “Risk Factors—Risks Related to Government Regulation—*If our current or future products become subject to FDA or other related international regulation, the regulatory clearance or approval and the maintenance of continued and post-market regulatory compliance for such products will be expensive, time-consuming, and uncertain both in timing and in outcome.*”

In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the California Consumer Privacy Act (“CCPA”), which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In November 2020, California voters passed the California Privacy Rights Act (“CPRA”), which will become effective in most material respects beginning on January 1, 2023. The CPRA further expands the CCPA with additional data privacy compliance requirements and obligations and establishes a regulatory agency dedicated to enforcing the CCPA and CPRA. While we are not currently subject to the CCPA and CPRA, we may in the future be required to comply with such laws, which may increase our compliance costs and potential liability. Furthermore, the CCPA and CPRA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, which could increase our potential liability and adversely affect our business.

In addition, the E.U. General Data Protection Regulation (“GDPR”), which became effective in May 2018, greatly increased the European Commission’s jurisdictional reach of its data privacy and security laws and added a broad array of requirements for handling personal data. EU member states are tasked under the GDPR to enact, and have enacted, certain implementing legislation that adds to and/or further interprets the GDPR requirements and potentially extends our obligations and potential liability for failing to meet such obligations. The GDPR, together with national legislation, regulations and guidelines of the EU member states governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR includes requirements to establish a legal basis for processing, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals, a strengthened individual data rights regime, requirements to implement safeguards to protect the security and confidentiality of personal data, data breach notification obligations to appropriate data protection authorities or individuals, limitations on retention and secondary use of information and additional obligations when entities contract with third-party processors to process personal data. The GDPR authorizes fines for certain violations of up to 4% of global annual revenue or €20 million, whichever is greater. Following the withdrawal of the United Kingdom from the European Union, data privacy and security laws that are substantially similar to the GDPR are in effect in the United Kingdom, which carry similar risks and authorize similar fines for certain violations. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR will be a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and

penalties, litigation, and reputational harm in connection with our European activities. We continue to monitor the changing legal and regulatory landscape to ensure our compliance with any applicable rules, laws and regulations.

For further discussion of the risks we face relating to data privacy and related regulations, see “Risk factors—General Risks—*We are currently subject to, and may in the future become subject to additional, U.S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue.*”

Intellectual Property

Our ability to obtain and maintain intellectual property protection for our products and technology is fundamental to the long-term success of our business. We rely on a combination of intellectual property protection strategies, including copyrights, patents, trademarks, trade secrets, license agreements, confidentiality policies and procedures, nondisclosure agreements, invention assignment agreements and technical measures designed to protect the intellectual property and commercially valuable confidential information and data used in our business.

As of May 31, 2021, we owned 34 issued U.S. patents, 26 pending U.S. patent applications (including four U.S. provisional patent applications), two pending Patent Cooperation Treaty (“PCT”) applications that have not entered national stage, 23 issued foreign patents and 38 pending foreign patent applications in various foreign jurisdictions. Excluding any possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity or other governmental fees, our owned issued patents are expected to expire between 2028 and 2037 and our owned patent applications, if issued, are expected to expire between 2028 and 2042. Our owned issued patents and patent applications that are material to our business include the following:

- Pending utility patent applications in the United States, China and Japan and issued utility patents in the United States, Austria, Belgium, China, Denmark, the European Patent Office (“EPO”), Finland, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland and the United Kingdom directed to the analysis and screening of cell secretion profiles. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables, our IsoLight and IsoSpark instruments, and our IsoSpeak software. These issued patents are expected to expire between 2035 and 2036 and the patent applications, if issued, are expected to expire between 2035 and 2036.
- Pending utility patent applications in the United States, China and the EPO directed to systems and methods for multiplexed analysis of cellular and other immunotherapeutics. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables. These patent applications, if issued, are expected to expire in 2037.
- Pending utility patent applications in the United States, China, Japan and the EPO directed to compositions and methods for the simultaneous genomic, transcriptomic and proteomic analysis of single cells. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables. These patent applications, if issued, are expected to expire in 2037.
- Pending utility patent applications in the United States, China and the EPO directed to systems, devices and methods for cell capture and methods of manufacture thereof. This technology is utilized in various products, including our reusable and single use cleaning chips, our IsoCode chip consumables and our IsoLight and IsoSpark instruments. These patent applications, if issued, are expected to expire in 2037.
- A pending PCT utility patent application that has not entered national stage directed to systems, devices and methods for multiplexed analysis. This technology is utilized in various products, including our CodePlex chip consumables and our IsoLight and IsoSpark instruments. Any U.S. or foreign patent issuing from this patent application, if such patent is issued, is expected to expire in 2041.
- A pending U.S. utility provisional patent application directed to compositions, devices and methods for simultaneous genomic, transcriptomic, and proteomic analysis of single cells. This technology is utilized in

various products, including our IsoCode chip consumables. Any U.S. or foreign patent issuing from this patent application, if such patent is issued, is expected to expire in 2041.

- A pending U.S. utility provisional patent application directed to methods and devices for multiplexed proteomic and genetic analysis. This technology is utilized in various products, including our IsoCode and CodePlex chip consumables. Any U.S. or foreign patent issuing from this patent application, if such patent is issued, is expected to expire in 2041.

Pursuant to the Patent Purchase Agreement described in the section titled “Prospectus Summary—Recent Developments,” we purchased a collection of issued patents and patent applications. The issued patents and patent applications purchased that are material to our business include the following:

- A pending U.S. utility patent application and issued U.S. utility patents directed to methods and compositions for incorporating nucleotides. These issued patents are expected to expire in 2029 and the patent application, if issued, is expected to expire in 2029.
- Issued U.S. utility patents directed to methods, compositions and solutions for inhibiting undesired cleaving of labels. These issued patents are expected to expire between 2029 and 2031.
- Pending and issued U.S. utility patents and patent applications directed to methods and devices for sequencing nucleic acids in smaller batches. These issued patents are expected to expire in 2028 and the patent applications, if issued, are expected to expire in 2029.
- A pending U.S. utility patent application and issued U.S. utility patents directed to methods and devices for amplification of nucleic acid. These issued patents are expected to expire in 2031 and the patent application, if issued, is expected to expire in 2029.
- Pending utility patent applications in the U.S., China, Japan and the EPO directed to polymerase enzymes. These patent applications, if issued, are expected to expire in 2036.
- Pending utility patent applications in the United States and the EPO and an issued utility patent in the United States directed to a DNA sequencing reaction additive. This issued patent is expected to expire in 2038 and the patent applications, if issued, are expected to expire in 2038.

We expect to utilize the patents purchased pursuant to the Patent Purchase Agreement to develop new products integrating our proprietary proteomics technologies with sequencing-based technologies to expand our existing capacities in single cell biology.

Our owned issued patents that are material to our business are summarized in tabular form below:

Patent Families with Issued Patent(s)	Scope of Issued Patent(s) in Patent Family	Products Related to Issued Patent(s) in Patent Family	Jurisdiction of Issued Patent(s) in Patent Family	Expiration of Issued Patent(s) in Patent Family
Analysis and Screening of Cell Secretion Profiles	<ul style="list-style-type: none"> • Systems • Methods of use • Computer implemented programming 	<ul style="list-style-type: none"> • IsoCode and CodePlex chip consumables • IsoLight and IsoSpark instruments • IsoSpeak software 	United States, Austria, Belgium, China, Denmark, the EPO, Finland, France, Germany, Japan, Netherlands, Norway, Sweden, Switzerland and the United Kingdom	2035-2036
Methods and Compositions for Incorporating Nucleotides	<ul style="list-style-type: none"> • Methods of use • Compositions of matter 	In development	United States	2029

Methods, Compositions and Solutions for Inhibiting Undesired Cleaving of Labels	<ul style="list-style-type: none"> • Systems • Methods of use • Compositions of matter 	In development	United States	2029-2031
Methods and Devices for Sequencing Nucleic Acids in Smaller Batches	<ul style="list-style-type: none"> • Systems • Methods of use 	In development	United States	2028
Methods And Devices For Amplification Of Nucleic Acid	<ul style="list-style-type: none"> • Methods of use 	In development	United States	2031
Directed to a DNA Sequencing Reaction Additive	<ul style="list-style-type: none"> • Method of use 	In development	United States	2038

As of May 31, 2021, we exclusively licensed six issued U.S. patents, five pending U.S. patent applications, four issued foreign patents and seven pending foreign patent applications in various foreign jurisdictions. Excluding any possible patent term adjustments or extensions and assuming payment of all appropriate maintenance, renewal, annuity or other governmental fees, our exclusively in-licensed issued patents are expected to expire between 2028 and 2038 and our exclusively in-licensed patent applications, if issued, are expected to expire between 2028 and 2038. Our exclusively in-licensed issued patents and patent applications material to our business include the following:

- Pending utility patent applications in the United States, the EPO and Japan and issued utility patents in the United States, China and Japan directed to a system, device and method for high-throughput multiplexed detection. This technology is utilized in various products, including our IsoCode chip consumables. These issued patents are expected to expire between 2033 and 2034 and the patent applications, if issued, are expected to expire in 2033.
- A pending U.S. utility patent application directed to methods and compositions for quantifying metabolites and proteins from single cells. This technology is utilized in our IsoCode single cell metabolomics solution. This patent application, if issued, is expected to expire in 2036.

Our in-licensed issued patents that are material to our business are summarized in tabular form below:

Patent Families with Issued Patent(s)	Scope of Issued Patent(s) in Patent Family	Products Related to Issued Patent(s) in Patent Family	Jurisdiction of Issued Patent(s) in Patent Family	Expiration of Issued Patent(s) in Patent Family
System, Device and Method for High-Throughput Multiplexed Detection	<ul style="list-style-type: none"> • Systems • Methods of use 	IsoCode chip consumables	United States, China and Japan	2033-2034

We intend to pursue additional intellectual property protection to the extent we believe it would be beneficial and cost-effective. Our ability to stop third parties from making, using or commercializing any of our patented inventions will depend in part on our success in obtaining, defending and enforcing patent claims that cover our technology, inventions, and improvements. With respect to both our owned and in-licensed intellectual property, we cannot provide any assurance that any of our current or future patent applications will result in the issuance of patents in any particular jurisdiction, or that any of our current or future issued patents will effectively protect any of our products or technology from infringement or prevent others from commercializing infringing products or technology.

In addition to our reliance on patent protection for our inventions, products and technologies, we also seek to protect our brand through the procurement of trademark rights. We own registered trademarks and pending trademark applications for “IsoPlexis,” “IsoLight,” “IsoSpark” and other product related brand names in the United

States and certain foreign jurisdictions. Furthermore, we rely on trade secrets, know-how, unpatented technology and other proprietary information, to strengthen our competitive position. We currently maintain as trade secrets our software and certain other technologies, including assays. To mitigate the chance of trade secret misappropriation, we enter into nondisclosure and confidentiality agreements with parties who have access to our trade secrets, such as our employees, consultants, advisors and other third parties. We also enter into invention assignment agreements with our employees and consultants that obligate them to assign to us any inventions they have developed while working for us. We generally control access to our proprietary and confidential information through the use of internal and external controls. Although we take steps to protect our proprietary information and trade secrets, third parties may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose our technology. As a result, we may not be able to meaningfully protect our trade secrets. Additionally, we use certain open source software in our products and services, including our IsoSpeak software, and anticipate using open source software in the future. The terms of various open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our services. For further discussion of the risks relating to intellectual property, see “Risk Factors—Risks Related to Our Intellectual Property.”

License Agreements

Yale University

In April 2014, we entered into a license agreement (as amended and restated in July 2014 and November 2015, and as further amended in December 2016 and January 2018, the “Yale Agreement”) with Yale University (“Yale”). Pursuant to the Yale Agreement, we obtained an exclusive, royalty-bearing, sublicensable (subject to certain restrictions), worldwide license to certain patent rights and certain information related to multiplexed detection and high-throughput single-cell polyomics to manufacture, use and commercialize products in all fields of use. The license granted pursuant to the Yale Agreement is subject to certain rights retained by (i) the United States government under the Bayh-Dole Act and (ii) Yale (on behalf of itself and other non-profit academic and/or research institutions) to make, practice and use the licensed patent rights and licensed products for research, clinical, teaching and other non-commercial purposes. Such rights retained by the United States government and Yale are typical for a license from a U.S. university or research institution, and we believe such rights do not pose a material risk to our business. We may sublicense the licensed patent rights subject to certain conditions, including that any sublicense agreement must contain terms consistent with the terms of the Yale Agreement and we must pay Yale a low double-digit percentage of our sublicense income. Furthermore, in connection with the first two sublicense agreements we enter into, we are obligated to pay Yale certain milestone payments that may equal up to \$15,000 in the aggregate.

In connection with entering into the Yale Agreement, we issued 7,772 shares of Series A redeemable convertible preferred stock to Yale valued at approximately \$51,000 at the time of issuance. We then amended the Yale Agreement in January 2018 to obtain an exclusive license to certain additional patent rights which include device, system and method of use claims directed to high-throughput single-cell polyomics to manufacture, use and commercialize products in all fields of use. In consideration for the inclusion of these patent rights, we issued 3,374 shares of Series B-2 redeemable convertible preferred stock to Yale valued at approximately \$100,000 at the time of issuance. In addition, we must pay Yale a customary annual license maintenance royalty (“LMR”) in the low six-figure dollars, as well as low single-digit percentage earned royalties on worldwide cumulative net sales of licensed products, which royalties are subject to reduction upon the occurrence of certain events as specified in the Yale Agreement. The LMR is credited against earned royalties due by the Company in the same calendar year. As of March 31, 2021, we have incurred an immaterial amount in royalty expense under the Yale Agreement. Additionally, in the event of our change of control, we are obligated to pay Yale a change of control fee up to the low six-figure dollars. Further, if we propose to sell any equity securities or securities that are convertible into equity securities in any preferred stock financing, then Yale has the right to invest up to the greater of either mid six-figure dollars or a low double-digit percentage of the financing round on the same terms and conditions as are offered to other investors with respect to such equity securities sold in such financing. To date, we have paid an aggregate amount of approximately \$0.3 million under the Yale Agreement.

Under the terms of the Yale Agreement, we are required to use reasonable commercial efforts to develop and sell the licensed products, including incurring minimum annual expenses on research and development with respect

to the licensed products, and we are restricted from developing, manufacturing or selling products that compete with the licensed products. Yale controls the filing, prosecution and maintenance of the licensed patent rights at our expense, subject to our ability to comment or approve certain related actions. We have the first right and obligation to institute a suit for infringement of the licensed patent rights and defend against any claim of invalidity or declaratory judgment action brought against the licensed patent rights. If we do not institute such suit or defend against such actions within a certain period of time, Yale has the right to convert the exclusive license granted under this license agreement to a non-exclusive license.

Unless terminated earlier, the Yale Agreement will continue, on a country-by-country basis, until the later of the expiration of the last to expire licensed patent right in a country or ten years after the date of first commercial sale of a licensed product in such country. The last to expire of the licensed issued patents under the Yale Agreement will expire in 2034 and the last to expire of the licensed patent applications under the Yale Agreement, if issued, will expire in 2038. Subject to an applicable cure period, Yale may terminate the Yale Agreement if we fail to comply with applicable payment obligations or upon a material breach of our obligations under the Yale Agreement, including our diligence obligations. Yale may also terminate the Yale Agreement if we fail to maintain adequate liability insurance or if we, directly or indirectly, challenge or oppose the validity, patentability or enforceability of any of the licensed patent rights, or if any of our sublicensees do so and we do not terminate the relevant sublicense agreement within a certain specified amount of time. The Yale Agreement automatically terminates if we cease to carry on our business for a certain specified period of time or for certain specified insolvency-related events. We may terminate the Yale Agreement at any time by providing advance written notice. Subject to a cure period, we may terminate the Yale Agreement upon material, uncured breach by Yale. Either party may terminate the Yale Agreement, on a country-by-country basis, if neither party elects to undertake the defense of a suit alleging infringement for a certain period of time in a country.

California Institute of Technology

In March 2017, we entered into an exclusive license agreement (the “Caltech Agreement”) with the California Institute of Technology (“Caltech”), pursuant to which we obtained an exclusive, royalty-bearing, sublicensable (subject to certain restrictions), worldwide license to certain patent rights related to methods and compositions for quantifying metabolites to manufacture, use and commercialize products in the field of detecting metabolites, including proteins and other analytes. The licenses granted pursuant to the Caltech Agreement are subject to certain rights retained by (i) the United States government under the Bayh-Dole Act and (ii) Caltech to make, import and use the licensed products for non-commercial purposes and to grant other non-profit institutions rights under the licensed patent rights and licensed technology for educational and research purposes. Such rights retained by the United States government and Caltech are typical for a license from a U.S. university or research institution, and we believe such rights do not pose a material risk to our business. We may sublicense the licensed patent rights and technology subject to certain conditions, including that any sublicense agreement must contain terms consistent with the terms of the Caltech Agreement, and we must pay Caltech a low double-digit percentage of our sublicense income.

In connection with entering into the Caltech Agreement, we issued 2,830 shares of Series B redeemable convertible preferred stock to Caltech valued at approximately \$50,000 at the time of issuance. In addition, we must pay Caltech a royalty on the exclusively licensed patent rights at a low single-digit percentage of net revenues on a country-by-country and licensed product-by-licensed product basis (with an annual minimum royalty in the range of low to mid five-figure dollars), which obligation will continue until the expiration of all patent claims covering such licensed product in such country. For any country in which the exclusively licensed patent rights do not include any valid claims, we must pay Caltech a royalty on the non-exclusively licensed technology at a lower single-digit percentage of net revenues for a period of ten years from the first commercial sale. In the event that we fail to commercialize products that incorporate the licensed patents or technology, the annual minimum royalties due to Caltech will increase in accordance with the terms of the Caltech Agreement. We are also required to pay Caltech a mid-teen percentage of sublicensing revenue. As of March 31, 2021, we have incurred an immaterial amount in royalty expense pursuant to the Caltech Agreement. There are no potential future milestone payments under the Caltech Agreement.

Under the terms of the Caltech Agreement, we are required to use commercially reasonable efforts to commercialize the licensed products. In the event that we fail to commercialize the licensed products, the annual minimum royalty payment due to Caltech will increase in accordance with the Caltech Agreement. Caltech controls the prosecution and maintenance of the licensed patents and patent applications at our expense, subject to our ability to comment on certain related actions. Caltech also has the first right to institute a suit and defend against a declaratory judgment action pertaining to infringement or invalidity of the licensed patent rights.

Unless terminated earlier, the Caltech Agreement continues until the expiration of the last to expire licensed patent right, or as long as we are obligated to pay royalties under the Caltech Agreement. The last to expire of the licensed patent applications under the Caltech Agreement, if issued, will expire in 2036. Subject to an applicable cure period, Caltech may terminate the Caltech Agreement if we fail to comply with applicable payment obligations, fail to maintain adequate liability insurance or upon a material breach of our obligations under the Caltech Agreement, including our diligence obligations, our obligation to mark licensed products with applicable patent numbers, our exploitation of any licensed patent rights outside of the licensed field or our cessation of commercial activities in the licensed field. Caltech may also terminate the Caltech Agreement for certain specified insolvency-related events. We may terminate our license to any particular licensed patent or patent application at any time by providing advance written notice. Subject to a cure period, we may terminate the Caltech Agreement upon material, uncured breach by Caltech.

Legal Proceedings

From time to time we are a party to various litigation matters incidental to the conduct of our business. We are not presently party to any legal proceedings the resolution of which we believe would have a material adverse effect on our business, prospects, financial condition, liquidity, results of operation, cash flows or capital levels.

MANAGEMENT

Executive Officers and Non-Employee Directors

The following table presents information regarding our executive officers and directors as of the date of this prospectus. Prior to effectiveness of this registration statement, we intend to disclose, in accordance with the rules and regulations of the SEC, the identity of two additional non-employee directors.

Name	Age	Position(s)	Date of Appointment
Executive Officers:			
Sean Mackay	38	Chief Executive Officer, Co-Founder and Director	2013
Jing Zhou	51	Chief Scientific Officer	2015
John Strahley	54	Chief Financial Officer	2019
Peter Siesel	56	Chief Commercial Officer	2020
Non-Employee Directors:			
John G. Conley	64	Chairman of the Board	2014
Michael Egholm	58	Director	2018
James R. Heath	59	Director	2015
Gregory P. Ho	68	Director	2014
Siddhartha Kadia	51	Director	2021
Daniel Wagner	50	Director	2014

Executive Officers

The following is biographical information and a brief summary of the business experience of our executive officers and directors.

Sean Mackay has served as our Chief Executive Officer and as a member of our board of directors since he co-founded the Company in 2014. Mr. Mackay also serves on the board of AbbraTech, a biotechnology company. Previously, Mr. Mackay worked at Lazard, and advised on a number of transactions across industries, helping life sciences and medical device companies manage and reconfigure their capital structures to pursue various operational goals. Additionally, Mr. Mackay was part of Kleiner Perkins-incubated Lifesquare, which aimed to connect patients, payers, and providers through sharing essential healthcare information. Throughout his career, Mr. Mackay has focused on advising and building companies that can improve the healthcare ecosystem with breakthrough technology. Mr. Mackay has co-authored publications centered around immunology and is an inventor on various patents for single cell products. We believe that Mr. Mackay is qualified to serve on our board of directors because of the perspective and experience he brings as our Chief Executive Officer, his experience in the biotechnology and life sciences industry and his scientific knowledge.

Jing Zhou, M.D., Ph.D., has served as our Chief Scientific Officer since 2020. Dr. Zhou served as our Senior Vice President of Translational Medicine from January 2019 to December 2019, Vice President of Immunology and Translational Medicine from January 2017 to December 2018, and Director of Immunology from January 2016 to December 2016. Working with the talented multidisciplinary teams at the Company, she is responsible for developing single cell assays for precisely profiling the functional properties and heterogeneity of immune cells using our IsoCode proteomics platform, and for discovery of predictive biomarkers as correlates of patient outcome to immunotherapies. Since joining the Company in 2015, she has led multiple studies with various biopharma and trial center leaders, particularly in the immuno-oncology space, to develop single cell polyfunctional metrics that can distinguish and predict patient response to CAR-T and antibody-based cancer immunotherapies. These novel findings have led to numerous presentations at prestigious scientific conferences including AACR, ASH, ASCO, SITC, FOCiS and high-impact publications in journals such as Blood and JITC. Prior to joining the Company, she was an immunologist at the Yale School of Medicine with expertise in defining phenotype and functionality of

immune cells in diseased and healthy settings, with a good track record of 30+ scientific publications in leading journals. Dr. Zhou earned her medical degree in Clinical Medicine from Bengbu Medical College, M.S. and Ph.D. in Immunology from Shanghai Jiao Tong University, and has been the principal investigator of NIH, AHA and Yale University grants.

John Strahley has served as our Chief Financial Officer since 2019. Prior to joining the Company, Mr. Strahley served as Managing Director at Ironwood Capital (“Ironwood”), a private equity fund manager, from 2010 to 2019. Mr. Strahley is a financial services professional with diverse experience in operational and investment roles with early-stage and closely held private companies. As CFO, Mr. Strahley leads strategic planning and financial management and reporting across the organization. While a Managing Director at Ironwood, Mr. Strahley was responsible for originating, structuring and closing debt and equity investments. In this role, Mr. Strahley worked closely with portfolio company management teams on strategy and execution, financial reporting, fund raising and acquisition. Prior to his time at Ironwood, Mr. Strahley was a Senior Vice President at Webster Bank, where he helped launch the bank’s venture capital practice, built a loan sales and structuring group and during the 2008 financial crisis, led the credit administration group. Mr. Strahley began his career as a certified public accountant.

Peter Siesel has served as our Chief Commercial Officer since 2020. From 2014 to 2020, Mr. Siesel held a variety of sales, marketing and management roles at Tecan, a global provider of automated workflow solutions in the life sciences and clinical diagnostics markets. As one of Tecan’s first employees, Mr. Siesel had a significant impact on the organization’s growth, including product and applications development, intellectual property, strategic partnerships and the creation of state-of-the-art sales process methodologies. Mr. Siesel oversaw triple digit sales growth as Tecan took advantage of the global genomics revolution. Under Mr. Siesel’s leadership, the United States became the market leader in liquid handling automation for key market segments such as bioprocessing, cell culture, genomics, molecular diagnostics and cfDNA. In his last position with Tecan, Mr. Siesel was Senior Vice President of Sales, where he was responsible for commercialization in the Americas.

Non-Employee Directors

John G. Conley has served as a member of our board of directors since 2014. Mr. Conley also serves on the board of Cognoptix, Inc., a biotechnology company, and Windgap Medical, Inc., a pharmaceutical company. Mr. Conley is also currently a partner at Gilliam Capital LLC, a life science investment firm he co-founded in 2007, and has been a member of Launchpad Venture Group since 2013. From 2015 to 2018, Mr. Conley served as the Chief Operating Officer of Entrepreneurship for All, a nonprofit that is accelerating economic and social impact through fostering entrepreneurship in mid-sized cities. He co-founded the RNA interference therapeutics company Alnylam Pharmaceuticals in 2002 where he held the position of Vice President, Strategy and Finance and Chief Financial Officer through to its successful IPO in 2004. Prior to that, he had over ten years of experience at Biogen where he served in several marketing, business development, sales and finance positions, including Country Manager – United Kingdom and Ireland, and Treasurer. He was a Manager at the strategy-consulting firm of Bain & Company for four years. Mr. Conley graduated with a B.S. in Economics from the University of Pennsylvania’s Wharton School and an M.B.A. from the Yale School of Management. He was a 2014 Fellow in the Advanced Leadership Initiative at Harvard University. We believe that Mr. Conley is qualified to serve on our board of directors because of his extensive leadership experience in the biotechnology and life sciences industries.

Michael Egholm, Ph.D., has served as a member of our board of directors since 2018. Dr. Egholm has served as the Chief Technology Officer of Danaher Life Sciences, the life sciences arm of Danaher Corporation, a global science and technology company, since 2017. Prior to that, he served as President, Biopharmaceuticals at Pall Corporation, a global supplier of filtration, separations and purification products, from 2014 to 2017 and as their Chief Technology Officer from 2010 to 2014. Dr. Egholm completed his Ph.D. and Master’s degree in Chemistry at the University of Copenhagen. We believe that Dr. Egholm is qualified to serve on our board of directors because of his expertise in the field of biochemistry and life sciences and track record of academic excellence.

James R. Heath, Ph.D., has served as a member of our board of directors since 2015. Dr. Heath has been president of the Institute of Systems Biology since 2018 and serves on the boards of PACT Pharma, Inc., a biotechnology company, and Indi Molecular, Inc., an emerging life sciences company. He is also a member of the Scientific Advisory Board of AtlasXomics Inc., a biotechnology company, and previously served on the board of

Sofie Biosciences, Inc., a biotechnology company that he co-founded, from 2010 to 2020. Dr. Heath was the Elizabeth W. Gilloon Professor and Professor of Chemistry at Caltech from 2003 to 2018, and Professor of Molecular & Medical Pharmacology at the University of California, Los Angeles (UCLA), and Director of the National Cancer Institute's NSB Cancer Center. He has founded or co-founded several companies, including NanoSys, MTI, and Indi Dx, and has served on the board of a number of organizations including the Board of Scientific Advisors of the National Cancer Institute. Dr. Heath graduated with a degree in Chemistry from Baylor University in Texas. He completed his Ph.D. in Physics and Chemistry from Rice University. He was awarded the 2000 Feynman Prize in Nanotechnology. He became a fellow of American Physical Society in 1999 and in 2009 he was named one of the seven most powerful innovators of the world by Forbes magazine. We believe that Dr. Heath is qualified to serve on our board of directors because of his extensive medical and scientific knowledge and track record of academic excellence.

Gregory P. Ho has served as a member of our board of directors since 2014. Mr. Ho serves as President of Spring Mountain Capital, LP ("SMC"), an investment management firm that he co-founded with John L. Steffens in 2001. Previously, he was a Principal and Chief Financial Officer of McKinsey & Company, Inc. ("McKinsey"). During his 16 years with McKinsey, he led financial and tax planning for the firm and its worldwide partner group. Mr. Ho was also a member of the firm's Investment Committee and a Trustee of McKinsey's Profit-Sharing Retirement Plan. In these capacities, he oversaw the identification, evaluation, and selection of traditional and alternative asset managers and investments for over \$1 billion of assets managed by the McKinsey Investment Office. After leaving McKinsey in 1998 and prior to co-founding SMC, Mr. Ho was a private investor and consultant. Prior to joining McKinsey, he was associated with the law firm of Donovan Leisure Newton & Irvine. Mr. Ho currently serves on the boards of ReNetX Bio, Inc. and AtlasXomics Inc. and is a member of the Advisory Board for Venture for America. He received a J.D. from Columbia Law School and a B.S. with honors in Administrative Science from Yale College. He is a member of the New York Bar and the California Bar. We believe that Mr. Ho is qualified to serve on our board of directors because of his financial expertise and experience in the venture capital industry.

Siddhartha Kadia, Ph.D., has served as a member of our board of directors since 2021. Dr. Kadia currently serves on the boards of NuVasive, Inc., a medical devices company, and ALS Limited, a testing and verification services company, as well as other private biotechnology companies. Dr. Kadia also previously served on the board of Horizon Discovery Group, a biotechnology company, in 2020. From 2014 to 2018, Dr. Kadia served as president and CEO of EAG, Inc., a global scientific services company providing analytical testing and consulting solutions. Prior to his time at EAG, Inc., Dr. Kadia spent nine years with Life Technologies Corporation and its predecessor Invitrogen Corporation. Dr. Kadia held various positions with increasing responsibilities, including marketing and operations roles, as well as leadership roles in Japan and China. Most notably, he served as President, Life Sciences Division at Life Technologies where he managed a \$2 billion product portfolio. Prior to Life Technologies, Dr. Kadia was a management consultant at McKinsey & Company in the Healthcare Practice, assisting global medical device companies, local and state governments, and healthcare providers. Dr. Kadia earned a B.E. in electronics and telecommunications from Gujarat University in India, an M.S. in biomedical engineering from Rutgers University, and a Ph.D. in biomedical engineering from Johns Hopkins University. We believe that Dr. Kadia is qualified to serve on our board of directors because of his extensive experience in leadership and the biotechnology and life sciences industries.

Daniel Wagner has served as a member of our board of directors since 2014. Mr. Wagner has served as Senior Managing Director of Investments at Connecticut Innovations, Incorporated ("CI") since 2007 and is an active board member of multiple life sciences companies. Mr. Wagner contributes to CI's expertise in biotechnology with more than 10 years in the industry. He was previously employed by CuraGen Corporation, where he held a variety of scientific and operational management positions. He holds an M.B.A. and M.H.S. degree in Biomedical Sciences from Quinnipiac University, and a B.S. degree in Biology from the University of Dayton. We believe that Mr. Wagner is qualified to serve on our board of directors because of his extensive experience in the biotechnology and life sciences industries and experience serving as a member of other private and public company boards.

Family Relationships

There are no family relationships among any of our directors or executive officers.

Board Composition

Our business and affairs are managed under the direction of our board of directors. The authorized number of members on our board of directors is currently nine. Pursuant to our amended and restated certificate of incorporation, dated as of December 30, 2020, as amended and as in effect prior to the completion of this offering (our “Pre-IPO Charter”), and the Voting Agreement (as defined below), Messrs. Ho, Wagner, Mackay, Kadia, Conley, Heath, Egholm, and have been designated to serve as members of our board of directors.

Under the terms of our Voting Agreement, the stockholders who are party thereto have agreed, among other things, to vote their respective shares to elect: (i) one director designated by Perceptive Life Sciences Master Fund, Ltd., who is currently ; (ii) one director designated by Northpond Ventures, LP, who is currently ; (iii) one director designated by SMC Growth Capital Partners II, LP, who is currently Mr. Ho; (iv) one director designated by Connecticut Innovations, Incorporated, who is currently Mr. Wagner; (v) one director who is a member of our management, who is currently Mr. Mackay; (vi) one director not otherwise an affiliate of the Company or of any investor, designated by the holders of a majority of the shares held by the Key Holders (as defined in the Voting Agreement) who are then providing services to the Company as officers, employees, consultants or advisors, who is currently Dr. Kadia; (vii) one director not otherwise an affiliate of the Company or of any investor who is mutually acceptable to the other members of our board of directors, who is currently Mr. Conley; (viii) one director designated by all the stockholders entitled to vote upon the election of directors (voting as a single class), who is currently Dr. Heath; and (ix) one director designated by DH Life Sciences LLC, who is currently Dr. Egholm.

The provisions of our Pre-IPO Charter and the Voting Agreement by which the directors are currently elected will terminate in connection with this offering and we will not be party to any contractual obligations regarding the election of our directors following this offering.

Upon the completion of this offering, our amended and restated certificate of incorporation will provide that the board of directors shall consist of at least but not more than directors and that the number of directors may be fixed from time to time by resolution of the board of directors. The board of directors will initially consist of members.

Director Independence

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning his or her background, employment and affiliations, our board of directors has determined that each of our directors other than Mr. Mackay does not have relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is “independent” under Nasdaq’s listing rules. In making these determinations, the board of directors considered the current and prior relationships that each non-employee director has with the Company and all other facts and circumstances the board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director, and any transactions involving them described in the section titled “Certain Relationships and Related Party Transactions.” Mr. Mackay is not considered independent because he is an employee of the Company.

Board Committees

Upon the completion of this offering, the board of directors will have three standing committees: the Audit Committee; the Compensation Committee; and the Nominating and Governance Committee. Each of the committees will operate under its own written charter adopted by the board of directors, each of which will be available on our website upon the completion of this offering. Members will serve on these committees until their resignation or until otherwise determined by the board of directors.

Audit Committee

Following this offering, the Audit Committee will be composed of _____, _____ and _____, with _____ serving as chairperson of the Audit Committee. We anticipate that, prior to the completion of this offering, the Audit Committee will determine that _____ meet the definition of “independent director” under the rules of Nasdaq and under Rule 10A-3 under the Exchange Act. Within 90 days following the effective date of the registration statement of which this prospectus forms a part, we anticipate that the Audit Committee will consist of a majority of independent directors, and within one year following the effective date of the registration statement of which this prospectus forms a part, the Audit Committee will consist exclusively of independent directors. Our board of directors has determined that _____ is an “audit committee financial expert” within the meaning of the SEC’s regulations and the applicable listing standards of Nasdaq.

The purpose of the Audit Committee will be assisting the board of directors’ oversight of (1) the integrity of our financial statements, (2) our compliance with legal and regulatory requirements, (3) the independent auditors’ qualifications and independence, and (4) the performance of the independent auditors and our internal audit function. The responsibilities of the Audit Committee will include:

- appointment, compensation, retention and oversight of the work of our independent auditors and any other registered public accounting firm engaged for the purpose of preparing or issuing an audit report or to perform audit, review or attestation service;
- pre-approval, or the adoption of appropriate procedures to pre-approve, all audit and non-audit services to be provided by our independent auditors;
- consideration of reports or communications submitted to the Audit Committee by our independent auditors, including reports and communications related to the overall audit strategy;
- meeting with management and our independent auditors to discuss the scope of the annual audit, to review and discuss our financial statements and related disclosures, to discuss any significant matters arising from any audit and any major issues regarding accounting principles and financial statement presentations;
- discussing with members of the legal department any significant legal, compliance or regulatory matters that may have a material effect on our financial statements, business or compliance policies; and
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters, and for the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters.

Compensation Committee

Following this offering, the Compensation Committee will be composed of _____, _____ and _____, with _____ serving as chairperson of the Compensation Committee. The responsibilities of the Compensation Committee will include:

- establishing and approving, and making recommendations to the board of directors regarding, performance goals and objectives relevant to the compensation of our Chief Executive Officer, evaluating the performance of our Chief Executive Officer in light of those goals and objectives and setting, or recommending to the full board of directors for approval, the Chief Executive Officer’s compensation, including incentive-based and equity-based compensation, based on that evaluation;
- setting the compensation of our other executive officers, based in part on recommendations of the Chief Executive Officer;
- exercising administrative authority under our equity incentive plans and employee benefit plans;
- establishing policies and making recommendations to our board of directors regarding director compensation; and

- preparing a compensation committee report on executive compensation as may be required from time to time to be included in our annual proxy statements or annual reports on Form 10-K filed with the SEC.

Nominating and Governance Committee

Following this offering, the Nominating and Governance Committee will be composed of _____, _____ and _____, with _____ serving as chairperson of the Nominating and Governance Committee. The responsibilities of the Nominating and Governance Committee will include:

- identifying and recommending director nominees, consistent with criteria approved by the board of directors;
- developing and recommending to the board of directors standards to be applied in making determinations as to the absence of material relationships between us and a director; and
- developing and recommending corporate governance guidelines to the board of directors.

Code of Ethics and Conduct

In accordance with Nasdaq's listing requirements and SEC rules, we will adopt a code of business conduct and ethics that applies to all of our employees, the members of our board of directors and our officers. The full text of the code will be posted on our website. We will make any legally required disclosures regarding amendments to, or waivers of, provisions of our code of ethics on our website. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding to purchase shares of our common stock.

Compensation Committee Interlocks and Insider Participation

None of the members of the Compensation Committee are current or former officers or employees of the Company. We are party to certain transactions with the principal stockholder described in "Certain Relationships and Related Party Transactions." None of our executive officers serves as a director or member of a compensation committee of another entity.

DIRECTOR COMPENSATION

None of our independent directors received any cash fees or grants of any equity or equity-based awards or any other compensation for their services as directors in 2020. As of March 31, 2021, Messrs. Conley and Heath held an aggregate of 13,594 stock options to purchase shares of our common stock (of which 11,208 were fully vested) and 30,236 stock options (of which 26,611 were fully vested), respectively.

In April 2021, we entered into a director agreement with Siddhartha Kadia, pursuant to which Dr. Kadia agreed to serve on our board of directors commencing on March 29, 2021. The agreement provides, among other things, that Dr. Kadia will receive \$50,000 annually for his service as a director and stock options to purchase 5,000 shares of our common stock subject to the terms of our 2014 Stock Plan (see “Executive Compensation—Equity Plans — 2014 Stock Plan”), with 25% of the stock options vesting upon the first anniversary of the vesting commencement date, and the remainder vesting in 36 equal monthly installments thereafter.

Post-Offering Director Compensation

Upon the completion of this offering, we will adopt a compensation policy for our independent directors (the “Director Compensation Policy”). The Director Compensation Policy will govern compensation paid to our independent directors beginning [redacted] and to any newly appointed independent directors as of the completion of this offering and is intended to reward our independent directors for their experience and performance, motivate them to achieve our long-term strategic goals, and help align our director compensation program with those of leading U.S.-based publicly traded companies. As we transition to become a publicly traded company, we intend to periodically evaluate our Director Compensation Policy as part of our regular reviews of our overall compensation strategy.

One-Time Grants

Under our Director Compensation Policy, new independent directors joining our board of directors would receive a one-time grant of \$ [redacted] of [redacted], based on the fair market value of our common stock at the time of the grant. The [redacted] vest over [redacted] years from the date of grant, subject to continued service.

Annual Retainers and Grants

Our Director Compensation Policy provides that each of our independent directors would receive an annual cash retainer of \$ [redacted]. Our Director Compensation Policy provides that we would grant to each applicable independent director \$ [redacted] of [redacted] to the Chair of our Audit Committee, \$ [redacted] of [redacted] to the Chair of our Compensation Committee, \$ [redacted] of [redacted] to the Chair of our Nominating and Governance Committee, \$ [redacted] of [redacted] to each member of our Audit Committee, \$ [redacted] of [redacted] to each member of our Compensation Committee and \$ [redacted] of [redacted] to each member of our Nominating and Governance Committee, in each case on an annual basis and based on the fair market value of our common stock at the time of the grants. These [redacted] would vest [redacted].

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our executive officers and directors which are described elsewhere in this prospectus, see “Executive Compensation—Narrative Disclosure to Summary Compensation Table—*Employment Agreements*,” below we describe transactions since January 1, 2018 to which we were or will be a participant and in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding voting securities, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest.

Convertible Preferred Stock Financings

Series D Convertible Preferred Stock Financing

In December 2020 and January 2021, we issued and sold an aggregate of 1,105,045 shares of our Series D redeemable convertible preferred stock at a purchase price of \$76.92 per share for an aggregate purchase price of approximately \$85.0 million. All shares of our Series D redeemable convertible preferred stock will convert into shares of our common stock concurrently with the closing of this offering in accordance with our Pre-IPO Charter. The following table summarizes purchases of our Series D redeemable convertible preferred stock by investors that hold more than 5% of our outstanding voting securities and their affiliated entities.

Investor	Series D Convertible Preferred Shares	Total Purchase Price
Connecticut Innovations, Incorporated ⁽¹⁾	13,000	\$ 999,960.00
Entities affiliated with BlackRock, Inc. ⁽²⁾	195,008	\$ 15,000,015.36
Entities affiliated with Danaher Innovation Center LLC ⁽³⁾	55,902	\$ 4,299,981.84
Entities affiliated with Northpond Ventures, LP ⁽⁴⁾	321,114	\$ 24,700,088.88
Entities affiliated with Perceptive Advisors LLC ⁽⁵⁾	390,016	\$ 30,000,030.72

(1) Daniel Wagner, a member of our board of directors, is affiliated with Connecticut Innovations, Incorporated.

(2) Entities affiliated with BlackRock, Inc. whose shares are aggregated for the purposes of reporting ownership information include BlackRock Health Sciences Master Unit Trust and BlackRock Health Sciences Trust II.

(3) Entities affiliated with Danaher Innovation Center LLC whose shares are aggregated for the purposes of reporting ownership information include Danaher Innovation Center LLC and DH Life Sciences LLC. Michael Egholm, a member of our board of directors, is affiliated with Danaher Innovation Center LLC.

(4) Entities affiliated with Northpond Ventures, LP whose shares are aggregated for the purposes of reporting ownership information include Northpond Capital, LP and Northpond Ventures II, LP, a member of our board of directors, is affiliated with Northpond Ventures, LP.

(5) Entities affiliated with Perceptive Advisors LLC whose shares are aggregated for the purposes of reporting ownership information include Perceptive Life Sciences Master Fund, Ltd., Perceptive Credit Holdings III, LP and PCOF EQ AIV III, LP.

Series C-2 Convertible Preferred Stock Financing

In December 2019, we issued and sold an aggregate of 515,218 shares of our Series C-2 redeemable convertible preferred stock at a purchase price of \$48.5231 per share for an aggregate purchase price of approximately \$25.0 million. All shares of our Series C-2 redeemable convertible preferred stock will convert into shares of our common stock concurrently with the closing of this offering in accordance with our Pre-IPO Charter. The following table

summarizes purchases of our Series C-2 redeemable convertible preferred stock by investors that hold more than 5% of our outstanding voting securities and their affiliated entities.

Investor	Series C-2 Convertible Preferred Shares	Total Purchase Price
Connecticut Innovations, Incorporated ⁽¹⁾	30,913	\$ 1,499,994.59
Entities affiliated with Danaher Innovation Center LLC ⁽²⁾	61,826	\$ 2,999,989.18
Entities affiliated with Northpond Ventures, LP ⁽³⁾	309,131	\$ 14,999,994.43
Entities affiliated with Spring Mountain Capital, LP ⁽⁴⁾	103,044	\$ 5,000,014.32

(1) Daniel Wagner, a member of our board of directors, is affiliated with Connecticut Innovations, Incorporated.

(2) Entities affiliated with Danaher Innovation Center LLC whose shares are aggregated for the purposes of reporting ownership information include Danaher Innovation Center LLC and DH Life Sciences LLC. Michael Egholm, a member of our board of directors, is affiliated with Danaher Innovation Center LLC.

(3) Entities affiliated with Northpond Ventures, LP whose shares are aggregated for the purposes of reporting ownership information include Northpond Capital, LP and Northpond Ventures II, LP. , a member of our board of directors, is affiliated with Northpond Ventures, LP.

(4) Entities affiliated with Spring Mountain Capital, LP whose shares are aggregated for the purposes of reporting ownership information include SMC Holdings II, LP, SMC Private Equity Holdings, LP and SMC Growth Capital Partners II, LP. Gregory Ho, a member of our board of directors, is affiliated with Spring Mountain Capital, LP.

Series C Convertible Preferred Stock Financing

In November 2018, we issued and sold an aggregate of 564,287 shares of our Series C redeemable convertible preferred stock at a purchase price of \$44.3037 per share for an aggregate purchase price of approximately \$25.0 million. All shares of our Series C redeemable convertible preferred stock will convert into shares of our common stock concurrently with the closing of this offering in accordance with our Pre-IPO Charter. The following table summarizes purchases of our Series C redeemable convertible preferred stock by investors that hold more than 5% of our outstanding voting securities and their affiliated entities.

Investor	Series C Convertible Preferred Shares	Total Purchase Price
Connecticut Innovations, Incorporated ⁽¹⁾	16,928	\$ 749,973.03
Entities affiliated with Danaher Innovation Center LLC ⁽²⁾	112,857	\$ 4,999,982.67
Entities affiliated with Northpond Ventures, LP ⁽³⁾	287,785	\$ 12,749,940.30
Entities affiliated with Spring Mountain Capital, LP ⁽⁴⁾	103,832	\$ 4,600,141.78
North Sound Ventures, LP	28,214	\$ 1,249,984.59

(1) Daniel Wagner, a member of our board of directors, is affiliated with Connecticut Innovations, Incorporated.

(2) Entities affiliated with Danaher Innovation Center LLC whose shares are aggregated for the purposes of reporting ownership information include Danaher Innovation Center LLC and DH Life Sciences LLC. Michael Egholm, a member of our board of directors, is affiliated with Danaher Innovation Center LLC.

(3) Entities affiliated with Northpond Ventures, LP whose shares are aggregated for the purposes of reporting ownership information include Northpond Capital, LP and Northpond Ventures II, LP. , a member of our board of directors, is affiliated with Northpond Ventures, LP.

(4) Entities affiliated with Spring Mountain Capital, LP whose shares are aggregated for the purposes of reporting ownership information include SMC Holdings II, LP, SMC Private Equity Holdings, LP and SMC Growth Capital Partners II, LP. Gregory Ho, a member of our board of directors, is affiliated with Spring Mountain Capital, LP.

Credit Agreement and Guaranty

We are party to our Credit Agreement, dated as of December 30, 2020, as amended on May 27, 2021, with Perceptive Credit Holdings III, LP, as Administrative Agent and as a lender, which provides for senior secured financing of up to \$50.0 million consisting of a \$25.0 million Tranche A term loan, a \$10.0 million Tranche B term

loan and a \$15.0 million Tranche C term loan. Perceptive Credit Holdings III, LP is an affiliate of Perceptive Advisors LLC, which is a holder of more than 5% of our outstanding voting securities. The full amount of the Tranche A term loan was drawn on December 30, 2020 and the full amount of the Tranche B term loan was drawn on May 27, 2021. Our ability to draw the Tranche C term loan is subject to several conditions, including that the Administrative Agent shall have received evidence that we achieved total revenue of at least \$20.0 million for the twelve-month period then most recently ended. Borrowings under the Credit Agreement bear interest at a rate per annum equal to the one-month LIBOR rate (with a minimum LIBOR rate for such purposes of 1.75%) plus a margin of 9.50%. The obligations under the Credit Agreement are secured by a security interest in substantially all of the assets of the Company, whether now owned or later acquired. In June 2021, we obtained from the lenders a waiver of the quarterly minimum total revenue covenant in the Credit Agreement for the twelve months ending June 30, 2021 and a waiver of any event of default under the Credit Agreement resulting from non-compliance with the quarterly minimum total revenue covenant. See “Description of Certain Indebtedness—Secured Term Loan Facility.”

In connection with the execution of the Credit Agreement, we issued to Perceptive Credit Holdings III, LP a warrant to purchase up to 97,504 shares of Series D redeemable convertible preferred stock at a price per share equal to \$76.92. See “Description of Capital Stock—Warrants.”

Investors’ Rights Agreement

We are party to our Sixth Amended and Restated Investors’ Rights Agreement (the “Investor Rights Agreement”), dated as of December 30, 2020, with certain holders of our capital stock, including entities affiliated with Northpond Ventures, LP, Spring Mountain Capital, LP, Perceptive Advisors LLC, Connecticut Innovations, Incorporated and Danaher Innovation Center LLC. The Investor Rights Agreement provides, among other things, that certain holders of our capital stock have the right to demand that we file a registration statement or request that their shares of capital stock be covered by a registration statement that we are otherwise filing, subject to certain exceptions. The registration and associated rights will expire no later than five years following the completion of this offering. See “Description of Capital Stock—Authorized Capital Stock—Registration Rights” for additional information regarding these registration rights. Also under our Investor Rights Agreement, our stockholders party thereto have entered into customary market standoff agreements with us for the benefit of the underwriters, pursuant to which such stockholders have entered into lock-up agreements in connection with the offering. See “Shares Eligible for Future Sale—Lock-Up Agreements and Market Standoff Provisions.” All other rights set forth in the Investor Rights Agreement will terminate immediately prior to the completion of this offering.

Right of First Refusal and Co-Sale Agreement

We are party to our Sixth Amended and Restated Right of First Refusal and Co-Sale Agreement (the “Right of First Refusal Agreement”), dated as of December 30, 2020, under which we have a right of first refusal, and certain holders satisfying an ownership threshold of redeemable convertible preferred stock have a right of first refusal and co-sale, with respect to shares of capital stock that certain stockholders propose to sell to third parties. The Right of First Refusal Agreement will terminate immediately prior to the completion of this offering. Entities affiliated with Northpond Ventures, LP, Spring Mountain Capital, LP, Perceptive Advisors LLC, Connecticut Innovations, Incorporated and Danaher Innovation Center LLC are among the parties to the Right of First Refusal Agreement.

Voting Agreement

We are party to our Sixth Amended and Restated Voting Agreement (the “Voting Agreement”), dated as of December 30, 2020, under which certain holders of our capital stock, including Sean Mackay, our Chief Executive Officer, and entities affiliated with Northpond Ventures, LP, Spring Mountain Capital, LP, Perceptive Advisors LLC, Connecticut Innovations, Incorporated and Danaher Innovation Center LLC, have agreed to the manner in which they will vote their shares on certain matters, including the election of directors. See “Management—Board Composition.” In connection with this offering, the Voting Agreement will terminate following completion of this offering and none of our stockholders will have any special rights regarding the election or designation of any members of our board of directors or the voting of our capital stock.

Indemnification Agreements

We are currently party to and, in connection with this offering, we intend to enter into, an indemnification agreement with each of our directors and officers. These agreements will require us to indemnify these individuals to the fullest extent permitted under the DGCL against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. See “Description of Capital Stock—Limitation of Liability and Indemnification of Directors and Officers.”

Policy on Related Party Transactions

In connection with this offering, we have adopted a policy with respect to the review, approval and ratification of related party transactions. Under the policy, our Audit Committee is responsible for reviewing and approving related party transactions. This policy will cover any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we were or are to be a participant and a related party had or will have a direct or indirect material interest, as determined by the Audit Committee, including purchases of goods or services by or from the related party or entities in which the related party has a material interest, and indebtedness, guarantees of indebtedness or employment by us of a related party. In the course of its review and approval of related party transactions, our Audit Committee will consider the relevant facts and circumstances to decide whether to approve such transactions, including, but not limited to, the purpose of the transaction, whether the transaction is on terms comparable to those that could be obtained in an arm’s length transaction with an unrelated third party under the same or similar circumstances and the extent of the related party’s interest in the transaction. Related party transactions must be approved or ratified by the Audit Committee based on full information about the proposed transaction and the related party’s interest.

EXECUTIVE COMPENSATION

As an emerging growth company under the JOBS Act, we have opted to comply with the executive compensation disclosure rules applicable to “smaller reporting companies” as such term is defined in the rules promulgated under the Securities Act, which permit us to limit reporting of executive compensation to our principal executive officer and our two other most highly compensated executive officers.

Our executive compensation program is designed to attract, motivate and retain high quality leadership and incentivize our executive officers to achieve performance goals over the short- and long-term, which also aligns the interests of our executive officers with those of our shareholders.

Our named executive officers (“NEOs”) for 2020, which consist of our principal executive officer and our two other most highly compensated executive officers, were:

- Sean Mackay, our Chief Executive Officer;
- John Strahley, our Chief Financial Officer; and
- Peter Siesel, our Chief Commercial Officer.

Summary Compensation Table

The following table presents compensation awarded to, earned by and paid to our NEOs for the fiscal year ended December 31, 2020.

Name and Principal Position	Year	Salary (\$)	Option Awards (\$) ⁽¹⁾	Nonequity Incentive Plan Compensation (\$) ⁽²⁾	Total (\$)
Sean Mackay, <i>Chief Executive Officer</i>	2020	380,000	439,560	150,000	969,560
John Strahley, <i>Chief Financial Officer</i>	2020	250,000	—	75,000	325,000
Peter Siesel, <i>Chief Commercial Officer</i>	2020	171,875 ⁽³⁾	40,700	80,000	292,575

(1) The amounts reported here do not reflect the actual economic value realized by each NEO. In accordance with SEC rules, these columns represent the grant date fair value of shares underlying stock options, calculated in accordance with Accounting Standards Update 718, “Compensation—Stock Compensation (Topic 718).” For additional information, see note 2 in “Notes to the Consolidated Financial Statements.” The assumptions used in calculating the grant date fair value of the stock options reported in this table are set forth in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates—Share-Based Compensation.”

(2) Reflects annual incentive bonuses. See “—Annual Incentive Awards” below for more information.

(3) Reflects Mr. Siesel’s annual salary pro-rated from his hire date in May 2020.

Narrative Disclosure to Summary Compensation Table

The following describes the material elements of our compensation program for the year ended December 31, 2020 as applicable to our NEOs and reflected in the Summary Compensation Table above. As part of our transition to a publicly-traded company in connection with this offering, we will evaluate our executive compensation program, which may differ in several respects from our historical program. For information on certain elements of our executive compensation program that we intend to adopt in connection with this offering, see “—Post-Offering Compensation” below.

Base Salary

Base salaries for our executive officers were established primarily based on individual negotiations with the executive officers when they joined the Company. In determining compensation for our executive officers, we considered salaries provided to executive officers of our peer companies, each executive officer's anticipated role criticality relative to others at the Company, and our determination of the essential need to attract and retain these executive officers.

Annual Incentive Awards

Each of our NEOs is eligible to receive an annual cash bonus, with the target opportunity expressed as an amount, in the case of Mr. Mackay, or a percentage of base salary in the case of Messrs. Strahley and Siesel and payable based upon the achievement of performance goals set annually by our board of directors.

Employee Benefits and Perquisites

Our NEOs are eligible to participate in our health and welfare plans on the same terms and conditions as provided to our full-time employees generally. We generally do not provide our NEOs with perquisites or other personal benefits.

Retirement Benefits

We maintain a 401(k) plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to defer eligible compensation up to certain Code limits, which are updated annually. Contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. Employees are immediately and fully vested in their own contributions. The Company may elect to make matching or other contributions into participants' individual accounts. The Company did not make any such contributions in 2020, but our board of directors has approved a 3% matching contribution beginning in respect of 2021. The 401(k) plan is intended to be qualified under Section 401(a) of the Code, with the related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan are deductible by us when made, and contributions and earnings on those amounts are not taxable to the employees until withdrawn or distributed from the 401(k) plan.

Employment Agreements

We currently do not have a formal employment agreement or offer letter with Mr. Mackay.

In November 2019 and May 2020, Messrs. Strahley and Siesel, respectively, each executed an offer letter with the Company, which provides for at-will employment and sets forth initial base salary, eligibility for an annual cash bonus and certain employee benefits. Mr. Strahley's offer letter additionally provides that upon a termination of his employment by the Company without cause at any time prior to, or within twelve months following, a "change in control" of the Company (as defined in the offer letter), Mr. Strahley would be entitled to an amount equal to six months of his then-current base salary, subject to his execution of the Company's standard form of severance agreement.

Long-Term Incentive Awards

We have granted our NEOs from time to time stock options to purchase shares of our common stock, each with an exercise price equal to the fair market value of a share of our common stock on the date of grant and subject to the terms of our 2014 Stock Plan (see "—Equity Plans—2014 Stock Plan" below) and the applicable award agreement. Generally 25% of the stock options granted to the NEOs vest upon the first anniversary of the vesting commencement date, with the remainder vesting in 36 equal monthly installments thereafter. Certain of Mr. Mackay's and Mr. Siesel's stock options are also subject to performance goals. For more information on the stock options granted to our NEOs and any applicable performance goals, see the "Outstanding Equity Awards Table" and accompanying footnote disclosure below.

In the event a NEO terminates employment for any reason, all unvested stock options are forfeited, unless the NEO is terminated by the Company for cause, in which case both vested and unvested stock options are forfeited.

In recognition of Mr. Mackay's performance during 2020, in December 2020 our board of directors accelerated the vesting of 85,000 of the 108,000 stock options granted to Mr. Mackay in 2020. In addition, 28,000 and 23,000 stock options granted to Mr. Mackay in 2018 and 2020, respectively, were forfeited in accordance with their terms or canceled, as applicable.

Outstanding Equity Awards at Fiscal Year-End

The following table presents information regarding outstanding equity awards held by our NEOs as of December 31, 2020.

Name	Grant Date	Option Awards			Option Exercise Price (\$)	Option Expiration Date
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#) ⁽¹⁾	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)		
Sean Mackay	11/01/2015	12,916	2,084	—	2.23	10/31/2025
	10/20/2016	6,500	—	—	3.52	10/19/2026
	10/05/2017	11,958	3,792	1,750 ⁽⁴⁾	5.81	10/4/2027
	01/16/2018	2,187	813	—	5.81	1/15/2028
	02/12/2018	5,000	1,000	—	5.81	2/11/2028
	06/29/2018	4,062	2,438	—	5.81	6/28/2028
	09/27/2018	2,812	2,188	—	5.81	9/26/2028
	12/14/2018	6,000	6,000	—	7.70	12/13/2028
	04/15/2020	85,000 ⁽²⁾	—	—	8.22	4/14/2030
John Strahley	12/04/2019	3,125	9,375	—	8.22	12/03/2029
Peter Siesel	06/10/2020	—	10,000 ⁽³⁾	—	8.22	06/09/2030

(1) These stock options are subject to the time-based vesting schedule described above in “—Long Term Incentive Awards.”

(2) These stock options were granted subject to the achievement of certain 2020 revenue targets. As described above in “—Long Term Incentive Awards”, in December 2020 our board of directors accelerated the vesting of these stock options.

(3) Includes 3,500 stock options that were subject to vesting based upon the achievement of our 2020 revenue target, which was achieved, in addition to the time-based vesting schedule described above in “—Long Term Incentive Awards.”

(4) These stock options vest based upon the achievement of specified sales goals and are also subject to the time-based vesting schedule described above in “—Long Term Incentive Awards.”

Emerging Growth Company Status

We are an “emerging growth company” as defined in the JOBS Act. As an emerging growth company we will be exempt from certain requirements related to executive compensation, including, but not limited to, the requirements to hold a nonbinding advisory vote on executive compensation and to provide information relating to the ratio of total compensation of our Chief Executive Officer to the median of the annual total compensation of all of our employees, each as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Potential Payments Upon Termination or Change in Control

Other than Mr. Strahley's severance payments described above in the section titled "—Employment Agreement," none of our NEOs are entitled to any payments or benefits that are payable upon termination or in connection with a change in control of the Company.

Equity Plans

2014 Stock Plan

Our 2014 Stock Plan (the "2014 Plan") was adopted by our board of directors and our stockholders in May 2014. Our 2014 Plan provides for the grant of non-qualified stock options, incentive stock options ("ISOs") and restricted and unrestricted stock. Awards may be granted to employees, officers, directors, advisors and consultants of the Company or any of its affiliates.

As of March 31, 2021, 505,916 shares of our common stock were available for issuance under our 2014 Plan. As of March 31, 2021, stock options to purchase 431,516 shares of our common stock were outstanding with a weighted-average exercise price of \$6.78 per share, of which stock options to purchase 289,724 shares were vested and exercisable with a weighted-average exercise price of \$5.29 per share.

Shares of our common stock granted under the 2014 Plan that are reacquired by the Company or underlying forfeited or canceled awards will again be available for issuance under the 2014 Plan.

Our 2014 Plan is administered by our board of directors or a committee designated by our board of directors (as applicable, the "administrator"). The administrator has the authority to grant awards; to construe, and determine the terms and provisions of, the applicable award agreements and the 2014 Plan (including correcting any defect or any inconsistencies); to prescribe, amend and rescind rules and regulations relating to the 2014 Plan; and to make all other determinations in the judgment of the administrator necessary or desirable for the administration of the 2014 Plan. The administrator's interpretation of the 2014 Plan is final and conclusive.

In the event of any recapitalization, reclassification, stock dividend, stock split, reverse stock split, liquidation, exchange of shares, spin-off, combination, consolidation or other similar transaction, an appropriate and proportionate adjustment shall be made in (i) the maximum number and kind of shares reserved for issuance under the 2014 Plan, (ii) the number and kind of restricted shares granted and shares or other securities subject to any then outstanding options and (iii) the exercise price of any stock options. The administrator's determination regarding adjustments will final, binding and conclusive.

In the event of a "change in control" (as defined in the 2014 Plan), the 2014 Plan provides the administrator with discretion to, with respect to an award, provide for (1) full or partial vesting or (2) cash-out of a vested award.

Awards granted under our 2014 Plan generally may not be transferred or assigned in any manner other than by will, by the laws of descent and distribution, unless otherwise permitted by the administrator.

The administrator may amend or modify the 2014 Plan at any time without either a participant's consent (unless such amendment or waiver would adversely impact the rights of the participant) or stockholder approval (unless such approval is required under applicable law).

Unless sooner terminated in accordance with its terms, the 2014 Plan will terminate upon the earliest of (i) any date determined by our board of directors, (ii) the date all shares under the 2014 Plan have been issued and are free of all restrictions and (iii) the dissolution or liquidation of the Company.

Post-Offering Compensation

2021 Equity Incentive Plan

We plan to adopt the 2021 Stock Plan (the "2021 Plan") pursuant to which equity-based and cash incentives may be granted to current or prospective directors, officers, employees and consultants. We expect our board of

directors to adopt, and our stockholders to approve, the 2021 Plan prior to the completion of this offering. The 2021 Plan is intended to replace the 2014 Plan and, once the 2021 Plan is effective, no further grants will be made under the 2014 Plan. The following is a summary of certain terms and conditions of the 2021 Plan.

The 2021 Plan will provide for the grant of nonqualified stock options, incentive (qualified) stock options, stock appreciation rights, restricted share awards, restricted stock units, performance awards, cash incentive awards and other equity-based awards (including deferred share units and fully vested shares).

Our Compensation Committee will administer the 2021 Plan and will have the authority to determine the terms and conditions of any agreements evidencing awards granted under the 2021 Plan and to establish, amend, suspend or waive such rules or regulations relating to the 2021 Plan as it deems appropriate. Our Compensation Committee will have full discretion to administer and interpret the 2021 Plan and to establish such rules, regulations and procedures, and to determine, among other things, the circumstances under which the awards may be vested, exercised or settled. With respect to director awards, our board of directors may, at its discretion, grant or administer such awards, or may delegate such authority to a committee of our board of directors.

Any current or prospective directors, officers, employees and consultants of the Company or its affiliates who are selected by our Compensation Committee will be eligible for awards under the 2021 Plan. As of the date of this prospectus, approximately _____ would be eligible.

The number of shares of our common stock initially reserved for issuance under the 2021 plan will be _____. The maximum amount payable to any non-employee director under the 2021 Plan for any single calendar year will be \$ _____.

Shares of our common stock underlying forfeited or canceled awards will again be available for issuance under the 2021 Plan, but shares of our common stock used to pay any exercise price or applicable tax withholding obligation with respect to an award will not.

If there is a change in the Company's corporate capitalization in the event of an extraordinary dividend or other extraordinary distribution (whether in the form of cash, shares or other securities or property), recapitalization, rights offering, stock split, reverse stock split, split-off or spin-off, our Compensation Committee will equitably adjust any or all of the following: (1) the number and kind of securities reserved for issuance under the 2021 Plan, (2) the number and kind of securities covered by awards then outstanding under the 2021 Plan and (3) the exercise price, if applicable, with respect to any award. In addition, upon any reorganization, merger, consolidation, combination, repurchase or exchange of securities of the Company, issuance of warrants or other rights to purchase securities of the Company or other similar corporate transaction or event affecting the shares or the financial statements of the Company or any affiliate, or any changes in applicable rules, rulings, regulations or other requirements of any governmental body or securities exchange, accounting principles or law, then our Compensation Committee may, in such manner as it may deem appropriate or desirable, (1) make any of the adjustments described above; (2) adjust any performance goal, target or measure, as applicable; (3) make provision for a cash payment to the holder of an outstanding award in consideration for the cancellation of such award; or (4) provide for the cancellation, substitution, termination or acceleration of vesting of any award.

Unless otherwise provided in an award agreement, in the event of a "change in control" (as defined in the 2021 Plan) in which no provision is made for the acquirer's assumption of or substitution for awards, then any outstanding unvested or unexercisable award will automatically become vested and exercisable immediately prior to such change in control, with any applicable performance conditions deemed achieved at target or actual performance as determined by our Compensation Committee.

Awards granted under our 2021 Plan generally may not be transferred or assigned in any manner other than by will, by the laws of descent and distribution, unless otherwise permitted by the committee.

Awards may be subject to clawback or forfeiture to the extent required by applicable law or the rules and regulations of Nasdaq or other applicable securities exchange, or if so required pursuant to a written policy adopted by the Company or the provisions of an award agreement.

The 2021 Plan will have a term of ten years. Our board of directors may amend, modify or terminate the 2021 Plan at any time, subject to stockholder approval of any amendment to increase the number of shares of our common stock reserved under the plan (other than certain adjustments upon changes in capitalization), to change the class of individuals eligible to participate or to reprice options or stock appreciation right in a manner that requires stockholder approval. No amendment, modification or termination may materially and adversely affect the rights of any participant of any award without the consent of the participant. Our Compensation Committee may amend, modify or terminate any award granted or related award agreement without a participant's consent unless such amendment, modification or termination would materially and adversely affect the rights of any participant. In addition, any such amendment or modification to reprice options or stock appreciation right in a manner that requires stockholder approval will be subject to such stockholder approval.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to beneficial ownership of our common stock as of _____ and as adjusted to reflect the issuance and sale of our common stock in this offering, assuming no exercise of the underwriters' option to purchase additional shares, for:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of the outstanding shares of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our executive officers and directors as a group.

The number of shares beneficially owned by each stockholder is determined under the rules of the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, warrants or other rights held by such person that are currently exercisable or will become exercisable within 60 days of _____, 2021 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

We have based our calculation of the applicable percentage of beneficial ownership prior to this offering on _____ shares of common stock outstanding as of _____, assuming (i) the Preferred Stock Conversion and (ii) the Series A-2 Warrant Exercise. We have based our calculation of the applicable percentage of beneficial ownership after this offering on shares of common stock outstanding immediately after the completion of this offering, giving effect to the foregoing assumptions (i) and (ii) and assuming that the underwriters will not exercise their option to purchase additional shares of our common stock from us.

Except as otherwise indicated in the footnotes to the following table, to our knowledge all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws.

Except as otherwise indicated, the address for each stockholder listed below is c/o IsoPlexis Corporation, 35 NE Industrial Rd, Branford, CT 06405.

Name and address of beneficial owners	Shares beneficially owned prior to this offering		Shares beneficially owned after this offering	
	Number	Percent	Number	Percent
5% stockholders:				
Connecticut Innovations, Incorporated ⁽¹⁾		%		%
Danaher Innovation Center LLC ⁽²⁾		%		%
Entities affiliated with BlackRock, Inc. ⁽³⁾		%		%
Entities affiliated with Northpond Ventures, LP ⁽⁴⁾		%		%
Entities affiliated with Perceptive Advisors LLC ⁽⁵⁾		%		%
Entities affiliated with Spring Mountain Capital, LP ⁽⁶⁾		%		%
North Sound Ventures, LP ⁽⁷⁾		%		%
Directors and named executive officers:				
Sean Mackay ⁽⁸⁾		%		%
John Conley ⁽⁹⁾		*		*
Michael Egholm		*		*
James Heath ⁽¹⁰⁾		*		*

Gregory Ho	*	*
Siddhartha Kadia ⁽¹¹⁾	*	*
Peter Siesel ⁽¹²⁾	*	*
John Strahley ⁽¹³⁾	*	*
Daniel Wagner	*	*
Jing Zhou ⁽¹⁴⁾	*	*
(15)	*	*
(15)	*	*
All executive officers and directors as a group (12 persons)	%	%

* Represents beneficial ownership of less than one percent of our outstanding shares of common stock.

- (1) Shares beneficially owned before this offering consist of (a) shares of common stock issuable upon the conversion of Series A redeemable convertible preferred stock directly held by Connecticut Innovations, Incorporated (“CII”), (b) shares of common stock issuable upon the conversion of Series A-2 redeemable convertible preferred stock directly held by CII, (c) shares of common stock issuable upon the conversion of Series B redeemable convertible preferred stock directly held by CII, (d) shares of common stock issuable upon the conversion of Series B-2 redeemable convertible preferred stock directly held by CII, (e) shares of common stock issuable upon the conversion of Series C redeemable convertible preferred stock directly held by CII, (f) shares of common stock issuable upon the conversion of Series C-2 redeemable convertible preferred stock directly held by CII and (g) shares of common stock issuable upon the conversion of Series D redeemable convertible preferred stock directly held by CII. Shares beneficially owned after this offering consist of . The CII EVP & CIO, David Wurzer, has the delegated authority from the Eli Whitney Investment Committee (“Eli Committee”) and the CBIF Advisory Committee to vote the CII shares. The Eli Committee, composed of 5 members of the CII board of directors, and the CBIF Advisory Committee, composed of 12 members appointed under statutory authority, have the power, acting together, to authorize disposal of the shares owned by CII by a majority vote of each committees’ members present when a quorum is present so that no individual committee member has the power to vote or authorize disposal of such shares. The Eli Whitney Investment Committee and the CBIF Advisory Committee disclaim any pecuniary interest in the shares held by CII. The address of CII is 470 James Street, Suite 8, New Haven, CT 06513.
- (2) Shares beneficially owned before this offering consist of (a) shares of common stock issuable upon the conversion of Series C redeemable convertible preferred stock directly held by Danaher Innovation Center LLC (“DHR Innovation”), (b) shares of common stock issuable upon the conversion of Series C-2 redeemable convertible preferred stock directly held by DHR Innovation and (c) shares of common stock issuable upon the conversion of Series D redeemable convertible preferred stock directly held by DHR Innovation. Shares beneficially owned after this offering consist of . DHR Innovation is an indirect, wholly owned subsidiary of Danaher Corporation. Danaher Corporation may be deemed to beneficially own the securities held by DHR Innovation. The address of DHR Innovation is 2200 Pennsylvania Avenue, N.W., Suite 800W, Washington, D.C. 20037.
- (3) Shares beneficially owned before this offering consist of (a) shares of common stock issuable to BlackRock Health Sciences Master Unit Trust and (b) shares of common stock issuable to BlackRock Health Sciences Trust II, in each case, upon the conversion of Series D redeemable convertible preferred stock. Shares beneficially owned after this offering consist of . The registered holders of the referenced shares are funds and accounts under management by subsidiaries of BlackRock, Inc. BlackRock, Inc. is the ultimate parent holding company of such subsidiaries. On behalf of such subsidiaries, the applicable portfolio managers, as managing directors (or in other capacities) of such entities, and/or the applicable investment committee members of such funds and accounts, have voting and investment power over the shares held by the funds and accounts which are the registered holders of the referenced shares. Such portfolio managers and/or investment committee members expressly disclaim beneficial ownership of all shares held by such funds and accounts. The address of such funds and accounts, such subsidiaries and such portfolio managers and/or investment committee members is 55 East 52nd Street, New York, NY 10055 and 60 State Street, 19th/20th Floor, Boston, MA 02109.
- (4) Shares beneficially owned before this offering consist of (a) shares of common stock issuable upon the conversion of Series C redeemable convertible preferred stock directly held by Northpond Ventures, LP, (b) shares of common stock issuable upon the conversion of Series C-2 redeemable convertible preferred stock directly held by Northpond Ventures, LP, (c)(i) shares of common stock issuable to Northpond Ventures, LP and (ii) shares of common stock issuable to Northpond Capital, LP, in each case, upon the conversion of Series D redeemable convertible preferred stock. Shares beneficially owned after this offering consist of . Northpond Ventures, LP is managed by Northpond Ventures GP, LLC (“Northpond GP”) and Northpond Capital, LP is managed by Northpond Capital GP, LLC (“Northpond Capital GP”). Michael P. Rubin is the managing member of Northpond GP and Northpond Capital GP. Each of Northpond GP and Mr. Rubin may also be deemed to beneficially own the shares held by Northpond Ventures, LP, and each of Northpond Capital

- GP and Mr. Rubin may also be deemed to beneficially own the shares held by Northpond Capital, LP. The address of the entities mentioned in this footnote is 7500 Old Georgetown Road, Suite 850, Bethesda, MD 20814.
- (5) Shares beneficially owned before this offering consist of (a)(i) shares of common stock issuable to Perceptive Life Sciences Master Fund, Ltd. (ii) shares of common stock issuable to Perceptive Credit Holdings III, LP and (iii) shares of common stock issuable to PCOF EQ AIV III, LP, in each case, upon the conversion of Series D redeemable convertible preferred stock and (b) shares of common stock issuable upon the exercise of the Series D Preferred Stock Warrant held by Perceptive Credit Holdings III, LP. Shares beneficially owned after this offering consist of . Perceptive Advisors LLC (“Perceptive”) is the investment manager to Perceptive Life Sciences Master Fund, Ltd. (“Master Fund”) and may be deemed to beneficially own the securities directly held by the Master Fund. Joseph Edelman is the managing member of Perceptive. Perceptive and Mr. Edelman may be deemed to beneficially own the securities held by the Master Fund. Perceptive Credit Advisors, LLC (“Perceptive Credit”), an affiliate of Perceptive, is the investment manager to Perceptive Credit Holdings III, LP and PCOF EQ AIV III, LP (together, “Perceptive Credit Affiliates”) and may be deemed to beneficially own the securities directly held by the Perceptive Credit Affiliates. Joseph Edelman is the managing member of Perceptive Credit. Perceptive Credit and Mr. Edelman may be deemed to beneficially own the securities held by the Perceptive Credit Affiliates. The address of Perceptive and Perceptive Credit is 51 Astor Place, 10th Floor, New York, New York 10003.
- (6) Shares beneficially owned before this offering consist of (a) shares of common stock issuable upon the conversion of Series A redeemable convertible preferred stock directly held by SMC Growth Capital Partners II, LP (“GCII”); (b)(i) shares of common stock issuable to GCII, (ii) shares of common stock issuable to SMC Private Equity Holdings, LP (“PEH”) and (iii) shares of common stock issuable to SMC Holdings II, LP (“Holdings”), in each case, upon the conversion of Series A-2 redeemable convertible preferred stock; (c)(i) shares of common stock issuable to GCII and (ii) shares of common stock issuable to PEH, in each case, upon the conversion of Series B redeemable convertible preferred stock; (d)(i) shares of common stock issuable to GCII and (ii) shares of common stock issuable to PEH, in each case, upon the conversion of Series B-2 redeemable convertible preferred stock; (e)(i) shares of common stock issuable to GCII and (ii) shares of common stock issuable to PEH, in each case, upon the conversion of Series C redeemable convertible preferred stock; and (f)(i) shares of common stock issuable to GCII and (ii) shares of common stock issuable to PEH, in each case, upon the conversion of Series C-2 redeemable convertible preferred stock. Shares beneficially owned after this offering consist of . SMC Growth Capital II GP, LLC, a Delaware limited liability company (“GCII GP”), is the general partner of GCII, and Spring Mountain Capital G.P., LLC, a Delaware limited liability company (“SMC GP”), is the managing member of GCII GP. John L. Steffens and Gregory P. Ho each serves as a managing member of SMC GP. Each of GCII GP, SMC GP, Mr. Steffens and Mr. Ho may be deemed to indirectly hold the securities held by GCII. GCII holds voting and dispositive power over the securities it holds. Each of Mr. Steffens, Mr. Ho, GCII GP and SMC GP disclaims beneficial ownership of these securities, except to the extent of their respective pecuniary interests therein. SMC Private Equity Holdings G.P., LLC, a Delaware limited liability company (“PEH GP”), is the general partner of PEH, and SMC GP is the managing member of PEH GP. Mr. Steffens and Mr. Ho each serves as a managing member of SMC GP. Each of PEH GP, SMC GP, Mr. Steffens and Mr. Ho may be deemed to indirectly hold the securities held by PEH. PEH holds voting and dispositive power over the securities it holds. Each of Mr. Steffens, Mr. Ho, PEH GP and SMC GP disclaims beneficial ownership of these securities, except to the extent of their respective pecuniary interests therein. SMC Holdings II G.P., LLC, a Delaware limited liability company (“Holdings GP”), is the general partner of Holdings. Mr. Steffens and Mr. Ho each serves as a managing member of Holdings GP. Each of Holdings GP, Mr. Steffens and Mr. Ho may be deemed to indirectly hold the securities held by Holdings. Holdings holds voting and dispositive power over the securities it holds. Each of Mr. Steffens, Mr. Ho and Holdings GP disclaims beneficial ownership of these securities, except to the extent of their respective pecuniary interests therein. The address of the entities mentioned in this footnote is 650 Madison Avenue, 20th Floor, New York, NY 10022.
- (7) Shares beneficially owned before this offering consist of (a) shares of common stock issuable upon the conversion of Series A redeemable convertible preferred stock directly held by North Sound Ventures, LP (“NSV”), (b) shares of common stock issuable upon the conversion of Series A-2 redeemable convertible preferred stock directly held by NSV, (c) shares of common stock issuable upon the conversion of Series B redeemable convertible preferred stock directly held by NSV, (d) shares of common stock issuable upon the conversion of Series B-2 redeemable convertible preferred stock directly held by NSV and (e) shares of common stock issuable upon the conversion of Series C redeemable convertible preferred stock directly held by NSV. Shares beneficially owned before this offering consist of . Brian Miller is the President of the General Partner of NSV and may be deemed to beneficially own the securities held by NSV. The address of NSV is 115 E. Putnam Ave, Greenwich, CT 06830.
- (8) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .
- (9) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .
- (10) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .

- (11) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .
- (12) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .
- (13) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .
- (14) Includes shares underlying stock options that are currently exercisable as of July 16, 2021 or vest within 60 days of .
- (15) Prior to effectiveness of this registration statement, we intend to disclose, in accordance with the rules and regulations of the SEC, the identity of two additional non-employee directors.

DESCRIPTION OF CERTAIN INDEBTEDNESS

The following is a summary of the material terms of certain of our indebtedness. The summary is qualified in its entirety by reference to the full text of the agreements governing the terms of such indebtedness, which are filed as exhibits to the registration statement of which this prospectus is a part.

Secured Term Loan Facility

Overview. On December 30, 2020, we entered into the Credit Agreement, as amended on May 27, 2021, with Perceptive Credit Holdings III, LP, as Administrative Agent, which provides for senior secured financing of up to \$50.0 million, consisting of:

- a \$25.0 million Tranche A term loan;
- a \$10.0 million Tranche B term loan; and
- a \$15.0 million Tranche C term loan.

In connection with the execution of the Credit Agreement, we issued to Perceptive Credit Holdings III, LP a warrant to purchase up to 97,504 shares of Series D redeemable convertible preferred stock at a price per share equal to \$76.92. See “Description of Capital Stock—Warrants.”

The full amount of the Tranche A term loan was drawn at the initial closing of the Credit Agreement on December 30, 2020 and the full amount of the Tranche B term loan was drawn on May 27, 2021. Our ability to draw the Tranche C term loan is subject to several conditions, including that the Administrative Agent shall have received evidence satisfactory to the Administrative Agent that we achieved total revenue of at least \$20.0 million for the twelve month period then most recently ended. All borrowings under the Credit Agreement are also subject to the satisfaction of customary conditions, including the accuracy of certain representations and warranties and the absence of a default. Unless accelerated prior to such date, all amounts outstanding under the Credit Agreement are due to be repaid on December 30, 2025. No regularly scheduled payments of principal or interest are required prior to the maturity date of the Credit Agreement.

Interest rate. Borrowings under the Credit Agreement bear interest at a rate per annum equal to the one-month LIBOR rate (with a minimum LIBOR rate for such purposes of 1.75%) plus a margin of 9.50%.

Collateral and Guarantees. The obligations under the Credit Agreement are secured by a security interest in substantially all of the assets of the Company, whether now owned or later acquired.

The obligations under the Credit Agreement are not currently guaranteed by any other person or entity. Any of our future majority-owned subsidiaries will be required to guarantee the obligations under the Credit Agreement.

Prepayments. We are required to prepay outstanding loans under the Credit Agreement, subject to certain exceptions, with:

- 100% of the net proceeds of certain asset sales and insurance/condemnation events, subject to reinvestment rights and certain other exceptions; and
- 100% of the net proceeds of any incurrence of debt, excluding certain permitted debt issuances.

In addition, voluntary prepayments of the loans are permitted, in whole or in part, in minimum amounts, subject to prepayment premiums as follows:

- on or prior to the first anniversary of the closing date of the Credit Agreement, 7% of the principal amount being prepaid;
- after the first anniversary of the closing date of the Credit Agreement, and on or prior to the second anniversary, 6% of the principal amount being prepaid;

- after the second anniversary of the closing date of the Credit Agreement, and on or prior to the third anniversary of the Closing Date, 4% of the principal amount being prepaid;
- after the third anniversary of the closing date of the Credit Agreement, and on or prior to the fourth anniversary, 3% of the principal amount being prepaid; and
- after the fourth anniversary of the closing date of the Credit Agreement, and prior to December 30, 2025, 2% of the principal amount being prepaid.

Restrictive covenants and other matters. The Credit Agreement requires us to comply with, among other things, (i) a minimum liquidity test requiring that we have unrestricted cash (as defined in the Credit Agreement) of not less than \$3.0 million at all times and (ii) a quarterly minimum total revenue covenant for the trailing twelve month period, which revenue threshold begins at approximately \$15.02 million for the twelve months ending June 30, 2021 and increases over time. We are currently in compliance with the minimum liquidity covenant and we expect that we will not be in compliance with the quarterly minimum total revenue covenant for the trailing twelve month period ending June 30, 2021. In June 2021, we obtained from the lenders a waiver of the quarterly minimum total revenue covenant for the twelve months ending June 30, 2021 and a waiver of any event of default resulting from non-compliance with the quarterly minimum total revenue covenant.

In addition, the Credit Agreement includes negative covenants that, subject to exceptions, limit our ability to, among other things:

- incur indebtedness or guarantees, or subject its assets to any liens;
- make investments and loans;
- make capital expenditures;
- engage in mergers, acquisitions and asset sales;
- engage in new lines of business;
- declare dividends, make payments or redeem or repurchase equity interests;
- enter into agreements limiting restricted subsidiary distributions;
- prepay, redeem or purchase certain indebtedness; and
- engage in certain transactions with affiliates.

The Credit Agreement also contains customary representations and warranties, affirmative covenants and events of default. If any such event of default occurs, the Administrative Agent under the Credit Agreement will be entitled to take various actions, including the acceleration of all amounts due under the Credit Agreement and all other actions permitted to be taken by a secured creditor.

DESCRIPTION OF CAPITAL STOCK

The following description summarizes the most important terms of our capital stock. We will adopt an amended and restated certificate of incorporation and amended and restated bylaws in connection with this offering, and the provisions of our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect upon the completion of this offering and relevant sections of the Delaware General Corporation Law (the "DGCL") are summarized below. The forms of our amended and restated certificate of incorporation and amended and restated bylaws have been filed as exhibits to the registration statement of which this prospectus is a part. The following descriptions of our capital stock and provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and provisions of the DGCL are summaries and are qualified by reference to our amended and restated certificate of incorporation and our amended and restated bylaws that will be in effect upon the completion of this offering, as well as to the relevant provisions of the DGCL.

Authorized Capital Stock

In connection with this offering, we expect to consummate the Stock Split.

Upon the completion of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of _____ shares of common stock, par value \$0.001 per share and _____ shares of preferred stock, par value \$0.001 per share. Assuming the Preferred Stock Conversion, as of March 31, 2021, there would have been _____ shares of common stock outstanding held by _____ stockholders of record and no shares of preferred stock outstanding. Following the completion of this offering, assuming (i) the Preferred Stock Conversion and (ii) no exercise of the underwriters' option to purchase additional shares of our common stock from us, we will have _____ shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

As of _____, we had _____ shares of common stock outstanding held by _____ stockholders of record. Holders of our common stock will be entitled to one vote per share on all matters submitted to a vote of stockholders, including the election of directors. Our common stockholders will not be entitled to cumulative voting in the election of directors. Unless a different vote is required by applicable law or specifically required by our amended and restated certificate of incorporation or amended and restated bylaws, if a quorum exists at any meeting of stockholders, stockholders shall have approved any matter (other than the election of directors, which is described below) if a majority of votes cast on such matter by stockholders present in person or represented by proxy at the meeting and entitled to vote on such matter are in favor of such matter. Subject to the rights of the holders of any series of preferred stock to elect directors under specified circumstances, if a quorum exists at any meeting of stockholders, stockholders shall have approved the election of a director if a plurality of the votes cast at any meeting for the election of such director are in favor of such election.

Subject to preferences that may be applicable to any shares of preferred stock outstanding or that we may designate and issue in the future, holders of our common stock will be entitled to receive ratably such dividends as may be declared by our board of directors out of funds legally available therefor if our board of directors, in its discretion, determines to issue dividends and only then at the times and in the amounts that our board of directors may determine.

Upon liquidation, dissolution or winding up of IsoPlexis Corporation, holders of our common stock will be entitled to receive their ratable share of the net assets of IsoPlexis Corporation available after payment of all debts and other liabilities, subject to the prior preferential rights and payment of liquidation preferences, if any, of any outstanding shares of preferred stock. Holders of our common stock will have no preemptive, subscription, redemption or conversion rights. There will be no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

As of _____, we had _____ shares of redeemable convertible preferred stock outstanding held by _____ stockholders of record, all of which will, concurrently with the closing of this offering, automatically convert into shares of our common stock. After the completion of this offering, no shares of our redeemable convertible preferred stock or any other series of preferred stock will be outstanding.

Our board of directors will have the authority, subject to the limitations imposed by Delaware law or Nasdaq's listing rules, without any further vote or action by our stockholders, to issue preferred stock in one or more series and to fix the designations, powers, preferences, limitations and rights of the shares of each series, including:

- dividend rates;
- conversion rights;
- voting rights;
- terms of redemption
- liquidation preferences;
- sinking fund terms; and
- the number of shares constituting each series.

Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of our liquidation, dissolution or winding-up before any payment is made to the holders of shares of our common stock.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock, and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock.

There are no current agreements or understandings with respect to the issuance of preferred stock and our board of directors has no present intentions to issue any shares of preferred stock.

Stock Options

As of _____, options to purchase _____ shares of our common stock were outstanding with a weighted-average exercise price of \$ _____ per share, of which options to purchase _____ shares were vested and exercisable with a weighted-average exercise price of \$ _____ per share.

Restricted Stock Units

As of March 31, 2021, there were no outstanding restricted stock units to receive shares of our common stock.

Warrants

In connection with entering into the Credit Agreement, we issued to Perceptive Credit Holdings III, LP a warrant to purchase up to 97,504 shares of Series D redeemable convertible preferred stock at a price per share equal to \$76.92. The Series D Preferred Stock Warrant provides for the adjustment of the exercise price and the number of shares issuable upon the exercise of the warrant in the event of certain stock dividends, stock subdivisions, stock combinations, reorganizations, reclassifications, fundamental changes or other similar transactions, including certain defined liquidity events in which the warrant is not exercised. The Series D Preferred Stock Warrant is exercisable

until the earlier of (i) the tenth anniversary of the issue date or (ii) the occurrence of certain defined liquidity events. Upon the completion of this offering, the Series D Preferred Stock Warrant will be exercisable for the number of shares of our common stock that would be issuable on conversion of the shares of our Series D redeemable convertible preferred stock that could otherwise be purchased pursuant to the warrant.

As of March 31, 2021, the Series D Preferred Stock Warrant was exercisable for an aggregate of 97,504 shares of our Series D redeemable convertible preferred stock at an exercise price of \$76.92 per share (or \$ per share as a result of the Stock Split effected on) and after the completion of this offering, it will be exercisable into shares of our common stock.

In September 2015, we granted to Connecticut Innovations, Incorporated the Series A-2 Preferred Stock Warrant to purchase up to 3,178 shares of our Series A-2 redeemable convertible preferred stock at a price per share equal to \$12.58608. The Series A-2 Preferred Stock Warrant was exercised on May 11, 2021, at an exercise price of \$12.58608 per share for 3,178 shares of Series A-2 redeemable convertible preferred stock.

Registration Rights

We are party to the Investor Rights Agreement, which provides, in relevant part, that certain holders of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act as described below. The registration rights set forth in the Investor Rights Agreement will terminate upon the earlier of (i) a deemed liquidation event (such as (a) a merger or consolidation in which we are a constituent party, (b) the sale, lease, transfer, exclusive license or other disposition by us of all or substantially all of our assets or (c) any transaction to which we are a party in which any entity or person, or a group of related persons or entities, acquires capital stock or other equity securities representing at least a majority of the voting power of the Company (other than in connection with certain financing transactions)) and (ii) five years following the completion of this offering, or, with respect to any particular stockholder, when such stockholder ceases to hold registrable securities (as defined in the Investor Rights Agreement). We will pay the registration expenses (other than underwriting discounts, selling commissions and other selling expenses), including the reasonable fees and disbursements of one counsel, of the holders of the securities registered pursuant to the registrations described below. However, we will not be required to bear the expenses in connection with the exercise of a demand registration if the registration request is subsequently withdrawn at the request of the selling stockholders holding a majority of the securities to be registered (in which case all selling stockholders shall bear such expenses pro rata based upon the number of shares that were to be included in the withdrawn registration), unless such selling stockholders agree to forfeit their right to one future registration.

S-1 Demand Registration Rights

After completion of this offering, the holders of shares of our common stock will be entitled to certain Form S-1 demand registration rights pursuant to the Investor Rights Agreement. At any time after the earlier of (i) December 30, 2023 and (ii) 180 days after the registration statement of which this prospectus forms a part is declared effective, the holders of at least 50% of the registrable securities then outstanding may make a written request that we register the offer and sale of their shares on a registration statement on Form S-1. Such request for registration must cover at least 40% of the registrable securities then outstanding, or a lesser percent if the anticipated aggregate offering price, net of payment of underwriting discounts, selling commissions and other selling expenses, is at least \$10.0 million. We are obligated to effect only one such registration. If we determine that it would be materially detrimental to us and our stockholders to effect such a demand registration, we have the right to defer such registration, not more than once in any 12-month period, for a period of up to 120 days. In addition, we will not be required to effect a demand registration during the period beginning 60 days prior to our good faith estimate of the date of the filing and ending on a date 180 days following the effectiveness of a registration statement initiated by us. In addition, in an underwritten public offering, the managing underwriter has the right, subject to specified conditions, to limit the number of shares that such holders may include for registration.

S-3 Registration Rights

After the completion of this offering, the holders of shares of our common stock will be entitled to certain Form S-3 demand registration rights pursuant to the Investor Rights Agreement. The holders of at least 20%

of registrable securities then outstanding may make a written request that we register the offer and sale of their shares on a registration statement on Form S-3 if we are eligible to file a registration statement on Form S-3, so long as the request covers securities the anticipated aggregate offering price of which, net of underwriting discounts, selling commissions and other selling expenses, is at least \$3.0 million. These stockholders may make an unlimited number of requests for registration on Form S-3. However, we will not be required to effect a registration on Form S-3 if we have effected two such registrations within the 12-month period preceding the date of the request. Additionally, if we determine that it would be materially detrimental to us and our stockholders to effect such a registration, we have the right to defer such registration, not more than once in any 12-month period, for a period of up to 120 days. Further, we will not be required to effect a demand registration during the period beginning 30 days prior to our good faith estimate of the filing of and ending on a date 90 days following the effectiveness of a registration statement initiated by us. In addition, in an underwritten public offering, the managing underwriter has the right, subject to specified conditions, to limit the number of shares that such holders may include for registration.

Piggyback Registration Rights

The Investor Rights Agreement provides that if we propose to register the offer and sale of our common stock under the Securities Act, in connection with the public offering of such common stock (including, for purposes of the registration rights under the Investor Rights Agreement, this offering), the holders of registrable securities will be entitled to certain “piggyback” registration rights allowing the holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to (i) a registration related to the sale of securities to our employees or a subsidiary’s employees pursuant to any employee benefit plan, (ii) a registration relating to a transaction covered by Rule 145 promulgated under the Securities Act, (iii) a registration on any registration form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of our registrable securities or (iv) a registration in which the only common stock being offered is common stock issuable upon conversion of debt securities that are also being registered, the holders of these registrable securities are entitled to notice of the registration and have the right, subject to certain limitations, to include their shares in the registration. We will have the right to terminate or withdraw any registration initiated pursuant to such “piggyback registration” rights described above before the effective date of such registration, whether or not any stockholder has elected to include shares of their common stock in such registration. In addition, in an underwritten public offering, the managing underwriter has the right, subject to specified conditions, to limit the number of shares that such holders may include for registration.

Certain Anti-Takeover Provisions of our Amended and Restated Certificate of Incorporation, our Amended and Restated Bylaws and Delaware Law

Certain provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and the DGCL may discourage or make more difficult a takeover attempt that a stockholder might consider to be in his, her or its best interest. These provisions may also adversely affect the prevailing market price for shares of our common stock. We believe that the benefits of increased protection give us the potential ability to negotiate with the proponent of an unsolicited proposal to acquire or restructure us, which may result in an improvement of the terms of any such proposal in favor of our stockholders, and outweigh any potential disadvantage of discouraging those proposals.

Authorized but Unissued Shares of Capital Stock

Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval, subject to the applicable provisions of the DGCL and rules of Nasdaq. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans.

One of the effects of the existence of authorized but unissued common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy

contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at a price higher than the prevailing market price.

Board Vacancies and Board Size

Our amended and restated certificate of incorporation and amended and restated bylaws will provide that any vacancies, including any newly created directorships, on our board of directors will be filled by the affirmative vote of the majority of the remaining directors then in office, even if such directors constitute less than a quorum, or by a sole remaining director. In addition, the number of directors constituting our board of directors will be permitted to be set only by a resolution adopted by a majority vote of our entire board of directors. These provisions would prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This will make it more difficult to change the composition of our board of directors and will promote continuity of management.

No Cumulative Voting

Under the DGCL, stockholders are not entitled to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation will not provide for cumulative voting.

Directors Removed Only for Cause

Our amended and restated certificate of incorporation will provide that stockholders may remove directors only for cause by the affirmative vote of holders of at least 66 2/3% of the voting power of our then outstanding capital stock.

Stockholder Action and Special Meetings of Stockholders

Our amended and restated certificate of incorporation and amended and restated bylaws will provide that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. As a result, a holder controlling a majority of our capital stock would not be able to amend our amended and restated bylaws or remove directors without holding a meeting of our stockholders called in accordance with our amended and restated bylaws. Our amended and restated bylaws will further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairperson of our board of directors or our Chief Executive Officer, thus prohibiting a stockholder from calling a special meeting. These provisions may delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our amended and restated bylaws will establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors at our annual meeting of stockholders, and will also specify certain procedural requirements regarding the form, content and timing of such notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of the Company.

Amendment of Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Any amendment, alteration, rescission or repeal of our amended and restated bylaws by our stockholders will require the affirmative vote of the holders of at least 66 2/3% in voting power of all the then outstanding shares of stock entitled to vote thereon, voting together as a single class, although our bylaws may be amended by a simple majority vote of our board of directors.

The DGCL provides generally that the affirmative vote of a majority of the outstanding shares entitled to vote thereon, voting together as a single class, is required to amend a corporation's certificate of incorporation or bylaws,

unless the corporation's certificate of incorporation requires a greater percentage. Our amended and restated certificate of incorporation will provide that certain specified provisions in our amended and restated certificate of incorporation, including provisions relating to the size of the board, removal of directors, special meetings, actions by written consent and cumulative voting, may be amended, altered, rescinded or repealed only by the affirmative vote of the holders of at least 66 2/3% in voting power of all the then outstanding shares of our stock entitled to vote thereon, voting together as a single class.

Section 203 of the Delaware General Corporation Law

We will be subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for three years following the date that such stockholder became an interested stockholder, unless:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by (1) persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include mergers, asset sales and other transactions resulting in a financial benefit to a stockholder and an "interested stockholder" as a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing changes in control of us.

Certain Provisions of Our Amended and Restated Certificate of Incorporation and Delaware Law

Dissenters' Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation in which we are a constituent entity. Pursuant to the DGCL, stockholders who properly demand and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Delaware Court of Chancery, if any, on the amount determined to be the fair value, from the effective time of the merger or consolidation through the date of payment of the judgment.

Stockholders' Derivative Actions

Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholder's stock thereafter devolved by operation of law. To bring such an action, the stockholder must otherwise comply with Delaware law regarding derivative actions.

Exclusive Forum

Our amended and restated certificate of incorporation will require, to the fullest extent permitted by law, that (1) any derivative action or proceeding brought on behalf of the Company, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action

asserting a claim against us arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws, (4) any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or amended and restated bylaws and (5) any other action asserting a claim against us that is governed by the internal affairs doctrine, in each case, may be brought only in specified courts in the State of Delaware. As described below, this provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or Exchange Act, or rules and regulations thereunder.

Our amended and restated certificate of incorporation also will provide that the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. However, Section 22 of the Securities Act provides that federal and state courts have concurrent jurisdiction over lawsuits brought pursuant to the Securities Act or the rules and regulations thereunder. To the extent the exclusive forum provision restricts the courts in which claims arising under the Securities Act may be brought, there is uncertainty as to whether a court would enforce such a provision. Our amended and restated certificate of incorporation will also provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to the foregoing provision; provided, however, that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. This provision does not apply to claims brought under the Exchange Act.

We recognize that the forum selection clause in our amended and restated certificate of incorporation may impose additional litigation costs on stockholders in pursuing any such claims, particularly if the stockholders do not reside in or near the State of Delaware. Additionally, the forum selection clause in our amended and restated certificate of incorporation may limit our stockholders' ability to bring a claim in a forum that they find favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. The Court of Chancery of the State of Delaware may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders. See "Risk Factors—Risks Related to Our Common Stock and This Offering—*Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, and also provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, each of which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, stockholders, or employees.*"

Limitation of Liability and Indemnification of Directors and Officers

Our amended and restated certificate of incorporation will include provisions that limit the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors, except to the extent that such limitation is not permitted under the DGCL. Such limitation shall not apply, except to the extent permitted by the DGCL, to (1) any breach of a director's duty of loyalty to us or our stockholders, (2) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (3) any unlawful payment of a dividend or unlawful stock repurchase or redemption, as provided in Section 174 of the DGCL, or (4) any transaction from which a director derived an improper personal benefit. These provisions will have no effect on the availability of equitable remedies such as an injunction or rescission based on a director's breach of his or her duty of care. Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to that amendment or repeal.

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide for indemnification, to the fullest extent permitted by the DGCL, of any person made or threatened to be made a party to any action, suit or proceeding by reason of the fact that such person is or was a director, officer, employee or agent of the Company, or, at the request of the Company, serves or served as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or any other enterprise, against all expenses, judgments, fines, amounts paid in settlement and other losses actually and reasonably incurred in connection with the defense or settlement of such action, suit or proceeding. In addition, we intend to enter into indemnification agreements with

each of our directors pursuant to which we will agree to indemnify each such director to the fullest extent permitted by the DGCL.

Inssofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, we have been informed that in the opinion of the SEC such indemnification is against public policy and is therefore unenforceable.

Listing

We have applied to list our common stock on Nasdaq under the symbol “ISO.”

Transfer Agent and Registrar

Upon the completion of this offering, the transfer agent and registrar for our common stock will be . The transfer agent’s address is .

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there was no market for shares of our common stock. Future sales of substantial amounts of our common stock in the public market could adversely affect market prices prevailing from time to time. Furthermore, because only a limited number of shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common stock in the public market after the restrictions lapse. This may adversely affect the prevailing market price and our ability to raise equity capital in the future.

Upon completion of this offering, based on the number of shares of our common stock outstanding as of March 31, 2021, assuming no exercise of the underwriters' option to purchase additional shares and after giving effect to the Preferred Stock Conversion, we will have _____ shares of common stock outstanding. Of the shares of common stock outstanding following this offering, the _____ shares of common stock (_____ shares of common stock if the underwriters exercise in full their option to purchase additional shares) sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any such shares of common stock held by our "affiliates", as defined in Rule 144 under the Securities Act, which would be subject to the limitations and restrictions described below under "—Rule 144."

The remaining shares of common stock that will be outstanding are "restricted shares" as defined in Rule 144 under the Securities Act. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rule 144 under the Securities Act.

Rule 144

In general, under Rule 144 under the Securities Act, as currently in effect, a person (or persons whose shares are aggregated) who is not deemed to be or have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than an affiliate, is entitled to sell such shares without registration, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of a prior owner other than an affiliate, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144.

In general, under Rule 144 under the Securities Act, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates, who have met the six-month holding period for beneficial ownership of "restricted shares" of our common stock, are entitled to sell within any three-month period, a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately _____ shares immediately after this offering; and
- the average weekly trading volume of our common stock during the four calendar weeks preceding the date of filing a Notice of Proposed Sale of Securities Pursuant to Rule 144 under the Securities Act with respect to the sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchased shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of a registration statement under the Securities Act are entitled to sell such shares 90 days after such effective date in reliance on Rule 144. An affiliate of ours can resell shares in reliance on Rule 144 without having to

comply with the holding period requirement, and non-affiliates of ours can resell shares in reliance on Rule 144 without having to comply with the current public information and holding period requirements.

The SEC has indicated that Rule 701 will apply to typical stock options granted before we become subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after we become subject to the reporting requirements of the Exchange Act.

Equity Incentive Plans

We intend to file with the SEC, as soon as practicable following the completion of the offering, a registration statement on Form S-8 to register the offer and sale of all of the shares of common stock issuable or reserved for issuance under our equity compensation plans. The Form S-8 will become effective upon filing and shares of common stock so registered will become freely tradable upon such effectiveness, subject to any restrictions imposed on such resale pursuant to the lock-up agreements entered into with the underwriters for the offering.

Lock-Up Agreements and Market Standoff Provisions

We and all of our directors, executive officers and certain other record holders that together represent approximately % of our outstanding common stock and securities directly or indirectly convertible into or exchangeable or exercisable for our common stock are subject to lock-up agreements with the underwriters, agreeing that, subject to certain exceptions, without the prior written consent of Morgan Stanley & Co. LLC on behalf of the underwriters, we and they will not, and will not publicly disclose an intention to, during the period ending 180 days after the date of this prospectus (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock; (2) file any registration statement with the SEC relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or (3) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock, whether any such transaction described in clause (1), (2) or (3) above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, certain holders of our capital stock are subject to market standoff provisions under our Investor Rights Agreement for the benefit of the underwriters that imposes similar restrictions. For additional information, see “Underwriters.”

Registration Rights Agreement

Pursuant to the Investor Rights Agreement, after the completion of this offering, the holders of up to shares of common stock will be entitled to rights with respect to the registration of their shares under the Securities Act. See “Description of Capital Stock—Authorized Capital Stock—Registration Rights” for a description of these registration rights. If the offer and sale of these shares of common stock are registered, the shares will be freely tradeable without restriction under the Securities Act, and a large number of shares may be sold into the public market, subject to the lock-up and market standoff agreements described above.

CERTAIN MATERIAL U.S. FEDERAL TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following is a general discussion of certain material U.S. federal income and estate tax consequences of the ownership and disposition of our common stock acquired in this offering by a “Non-U.S. Holder” that does not own, and has not owned, actually or constructively, more than 5% of our common stock. A “Non-U.S. holder” means a beneficial owner of our common stock (other than an entity treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes, any of the following:

- an individual citizen or resident of the United States;
- a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

You are not a Non-U.S. Holder if you are a nonresident alien individual present in the United States for 183 days or more in the taxable year of your disposition of our common stock, or if you are a former citizen or former resident of the United States for U.S. federal income tax purposes. If you are such a person, you should consult your tax adviser regarding the U.S. federal income tax consequences of the ownership and disposition of our common stock.

If an entity or arrangement that is treated as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the tax treatment of the partnership. A partner in a partnership holding our common stock should consult its tax advisor with regard to the United States federal income tax treatment of an investment in the common stock.

This discussion is based on the Internal Revenue Code of 1986, as amended to the date hereof (the “Code”), administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, all of which are subject to differing interpretation or changes subsequent to the date thereof, that may affect the tax consequences described herein, possibly with retroactive effect. This discussion is limited to Non-U.S. Holders that hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code. This discussion does not describe all of the tax consequences that may be relevant to you in light of your particular circumstances, including alternative minimum tax and Medicare contribution tax consequences and does not address any aspect of state, local or non-U.S. taxation, or any taxes other than income and estate taxes. In addition, it does not represent a detailed description of the U.S. federal income and estate tax consequences applicable to you if you are subject to special treatment under the U.S. federal income tax laws (including if you are a foreign pension fund, “controlled foreign corporation” or “passive foreign investment company,” bank or other financial institution, insurance company, tax exempt or governmental organization, dealer or trader in securities, holder that elects to mark its securities to market or holds our common stock as part of a straddle, conversion or other integrated transaction, holder deemed to sell our common stock under the constructive sale provisions of the Code, holder subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into account in an applicable financial statement or holder who acquired shares of our common stock as compensation or in connection with the performance of services).

You should consult a tax advisor regarding the U.S. federal tax consequences of acquiring, holding and disposing of common stock in your particular circumstances, as well as any tax consequences that may arise under the laws of any state, local or foreign taxing jurisdiction.

Dividends

As described in the section titled “Dividend Policy,” we do not anticipate declaring or paying dividends to holders of our common stock in the near term. However, if we make a distribution of cash or other property (other than certain distributions of our stock) in respect of our common stock, the distribution generally will be treated as a dividend to the extent of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Any portion of a distribution that exceeds our current and accumulated earnings and profits will generally be treated first as a tax-free return of capital, on a share-by-share basis, to the extent of your tax basis in our common stock (and will reduce your basis in such common stock, but not below zero), and, to the extent such portion exceeds your tax basis in our common stock, the excess will be treated as gain from the taxable disposition of the common stock, the tax treatment of which is discussed below under “—Gain on Disposition of Common Stock.”

Except as described below, dividends paid to you are subject to U.S. withholding tax at a 30% rate or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate. Even if you are eligible for a lower treaty rate, the applicable withholding agent will generally be required to withhold at a 30% rate (rather than the lower treaty rate) on dividend payments to you, unless you have furnished to us a valid IRS Form W-8 or an acceptable substitute form upon which you certify under, penalties of perjury, your status as a non-United States person and your entitlement to the lower treaty rate with respect to such payments.

If you are eligible for a reduced rate of U.S. withholding tax under a tax treaty, you may obtain a refund of any amounts withheld in excess of that rate by timely filing a refund claim with the IRS.

If dividends paid to you are “effectively connected” with your conduct of a trade or business within the United States, and, if required by a tax treaty, the dividends are attributable to a permanent establishment that you maintain in the United States, the applicable withholding agent is not required to withhold tax from the dividends, provided that you have furnished a valid IRS Form W-8ECI or an acceptable substitute form upon which you represent, under penalties of perjury, that:

- you are a non-United States person; and
- the dividends are effectively connected with your conduct of a trade or business within the United States and are includible in your gross income.

“Effectively connected” dividends are taxed at rates applicable to U.S. citizens, resident aliens and U.S. corporations. If you are a corporate Non-U.S. Holder, “effectively connected” dividends that you receive may, under certain circumstances, be subject to an additional “branch profits tax” at a 30% rate or at a lower rate if you are eligible for the benefits of an income tax treaty that provides for a lower rate.

Gain on Disposition of Common Stock

Subject to the discussions below under “—Backup Withholding and Information Reporting” and “—FATCA Withholding,” you generally will not be subject to U.S. federal income tax or withholding tax on gain that you recognize on a disposition of common stock unless:

- the gain is “effectively connected” with your conduct of a trade or business in the United States (and if required by an applicable income tax treaty, the gain is attributable to a permanent establishment that you maintain in the United States);
- we are or have been a “United States real property holding corporation” (“USRPHC”) as described below, at any time within the five-year period preceding the disposition or your holding period, whichever period is shorter, you are not eligible for a treaty exemption, and either (1) our common stock is not regularly traded on an established securities market prior to the beginning of the calendar year in which the sale or disposition occurs (as such terms are defined by applicable U.S. Treasury regulations) or (2) you owned or are deemed to have owned, at any time within the five-year period preceding the disposition or your holding period, whichever period is shorter, more than 5% of our common stock.

If the gain from the taxable disposition of shares of our common stock is effectively connected with your conduct of a trade or business in the United States (and, if required by a tax treaty, the gain is attributable to a permanent establishment that you maintain in the United States), you will generally be taxed on such gain in the same manner as a United States person. You should consult your tax adviser with respect to other U.S. tax consequences of the ownership and disposition of our common stock, including the possible imposition of a branch profits tax at a rate of 30% (or a lower treaty rate) if you are a corporation.

We will be a USRPHC at any time that the fair market value of our “United States real property interests,” (“USRPIs”) as defined in the Code and applicable U.S. Treasury regulations, equals or exceeds 50% of the aggregate fair market value of our worldwide real property interests and our other assets used or held for use in a trade or business (all as determined for the U.S. federal income tax purposes). We believe that we are not currently, and do not anticipate becoming in the foreseeable future, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future.

FATCA Withholding

Pursuant to sections 1471 through 1474 of the Code, commonly known as the Foreign Account Tax Compliance Act (“FATCA”), a 30% withholding tax (“FATCA withholding”) may be imposed on certain payments to foreign financial institutions (which is broadly defined for this purpose and generally includes investment vehicles) and certain other non-U.S. entities receiving payments on your behalf, unless certain U.S. information reporting and due diligence requirements have been satisfied or an exemption applies. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Payments of dividends that you receive in respect of our common stock could be affected by FATCA withholding if you hold our common stock through a foreign financial institution or non-U.S. entity that is required to comply with these requirements (even if payments to you would not otherwise have been subject to FATCA withholding). In addition, although a 30% withholding tax would have applied under FATCA to payments of gross proceeds of dispositions of our common stock, proposed U.S. Treasury regulations eliminate this 30% withholding tax on payments of gross proceeds. Taxpayers may rely on these proposed U.S. Treasury regulations until final U.S. Treasury regulations are issued. You should consult your own tax advisors regarding the relevant U.S. law and other official guidance on FATCA withholding.

Backup Withholding and Information Reporting

Information returns are required to be filed with the IRS in connection with any distributions on our common stock. Unless you comply with certification procedures to establish that you are not a United States person, information returns may also be filed with the IRS with respect to the proceeds from a sale or other disposition of our common stock. You may be subject to backup withholding on payments of dividends on our common stock or on the proceeds from a sale or other disposition of our common stock unless you comply with certification procedures to establish that you are not a United States person or otherwise establish an exemption. Your provision of a properly executed applicable IRS Form W-8 certifying your non-U.S. status will permit you to avoid backup withholding. Amounts withheld under the backup withholding rules are not additional taxes and may be refunded or credited against your U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Federal Estate Taxes

Individual Non-U.S. Holders and entities the property of which is potentially includible in such an individual’s gross estate for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interests or powers) should note that, absent an applicable treaty exemption, our common stock will be treated as U.S.-situs property subject to U.S. federal estate tax.

UNDERWRITERS

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC, Cowen and Company, LLC, Evercore Group, L.L.C. and SVB Leerink LLC are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

Underwriter	Number of Shares
Morgan Stanley & Co. LLC	
Cowen and Company, LLC	
Evercore Group, L.L.C.	
SVB Leerink LLC	
Total:	

The underwriters and the representatives are collectively referred to as the “underwriters” and the “representatives,” respectively. The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters’ over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at a price that represents a concession not in excess of \$ _____ per share under the public offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to _____ additional shares of common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter’s name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters’ option to purchase up to an additional _____ shares of common stock.

	Per Share	Total	
		No Exercise	Full Exercise
Public offering price	\$	\$	\$
Underwriting discounts and commissions to be paid by us	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$ _____. We have agreed to reimburse the underwriters for certain of their expenses in an amount not to exceed \$ _____.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock offered by them.

We have applied to list our common stock on the Nasdaq Global Market under the trading symbol “ISO.”

We and all directors and officers and certain holders of our outstanding stock and stock options (the “lock-up parties”) have agreed, subject to certain exceptions, that, without the prior written consent of Morgan Stanley & Co. LLC on behalf of the underwriters, we and they will not, and will not publicly disclose an intention to, during the period ending 180 days after the date of this prospectus (the “restricted period”):

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock;
- file any registration statement with the Securities and Exchange Commission relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock;

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each of the lockup parties agrees that, without the prior written consent of Morgan Stanley & Co. LLC on behalf of the underwriters, we or such lock-up party will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

Morgan Stanley & Co. LLC, in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment

management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Pricing of the Offering

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price were our future prospects and those of our industry in general, our sales, earnings and certain other financial and operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area (each a “Relevant State”), no shares have been offered or will be offered pursuant to the Offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation), except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require the Issuer or any Manager to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

The Company, the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the

offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

The above selling restriction is in addition to any other selling restrictions set out below.

United Kingdom

In relation to the United Kingdom (“UK”), no shares have been offered or will be offered pursuant to the offering to the public in the UK prior to the publication of a prospectus in relation to the shares has been approved by the Financial Conduct Authority in accordance with the UK Prospectus Regulation and the FSMA, except that offers of shares may be made to the public in the UK at any time under the following exemptions under the UK Prospectus Regulation and the FSMA:

- to any legal entity which is a qualified investor as defined under the UK Prospectus Regulation;
- to fewer than 150 natural or legal persons (other than qualified investors as defined under the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- at any time in other circumstances falling within section 86 of the FSMA,

provided that no such offer of shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or Article 3 of the UK Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

Each person in the UK who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the Company and the Managers that it is a qualified investor within the meaning of the UK Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the UK Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in the UK to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

The Company, the representatives and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares in the UK means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018, and the expression “FSMA” means the Financial Services and Markets Act 2000.

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the “Financial Promotion Order”), (ii) are persons falling within Article 49(2)(a) to (d) (“high net worth companies, unincorporated associations etc.”) of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended (“FSMA”)) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as “relevant persons”). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission ("ASIC"), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Switzerland

This document is not intended to constitute an offer or solicitation to purchase or invest in the securities. The securities may not be publicly offered, directly or indirectly, in Switzerland within the meaning of the Swiss Financial Services Act ("FinSA") and no application has or will be made to admit the securities to trading on any trading venue (exchange or multilateral trading facility) in Switzerland. Neither this document nor any other offering or marketing material relating to the securities constitutes a prospectus pursuant to the FinSA, and neither this document nor any other offering or marketing material relating to the securities may be publicly distributed or otherwise made publicly available in Switzerland.

Japan

No registration pursuant to Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) (the “FIEL”) has been made or will be made with respect to the solicitation of the application for the acquisition of the shares of common stock.

Accordingly, the shares of common stock have not been, directly or indirectly, offered or sold and will not be, directly or indirectly, offered or sold in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements, and otherwise in compliance with, the FIEL and the other applicable laws and regulations of Japan.

For Qualified Institutional Investors (“QII”)

Please note that the solicitation for newly-issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of common stock constitutes either a “QII only private placement” or a “QII only secondary distribution” (each as described in Paragraph 1, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of common stock. The shares of common stock may only be transferred to QIIs.

For Non-QII Investors

Please note that the solicitation for newly-issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of common stock constitutes either a “small number private placement” or a “small number private secondary distribution” (each as is described in Paragraph 4, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of common stock. The shares of common stock may only be transferred en bloc without subdivision to a single investor.

Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (“DFSA”). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong), or the Companies (Winding Up and Miscellaneous Provisions) Ordinance, or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong), or the Securities and Futures Ordinance, or (ii) to “professional investors” as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect

to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation’s securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore, or Regulation 32.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Singapore SFA Product Classification—In connection with Section 309B of the SFA and the Securities and Futures (Capital Markets Products) Regulations 2018 (the “CMP Regulations 2018”), the Company has determined, and hereby notifies all relevant persons (as defined in the CMP Regulations 2018), that the shares are “prescribed capital markets products” (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

LEGAL MATTERS

The validity of the shares of our common stock offered hereby will be passed upon for us by Cravath, Swaine & Moore LLP, New York, New York. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP, New York, New York.

EXPERTS

The financial statements as of December 31, 2019 and 2020, and for each of the two years in the period ended December 31, 2020, included in this prospectus and registration statement, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such financial statements are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act for the shares of our common stock being offered by this prospectus. This prospectus, which is part of the registration statement, does not contain all of the information included in the registration statement or the exhibits filed thereto. For further information about us and the common stock offered hereby, you should refer to the registration statement and the exhibits filed thereto, which are available on the website of the SEC referred to below. References in this prospectus to any of our contracts or other documents are not necessarily complete, and each such reference is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement.

Upon completion of this offering, we will be subject to the reporting and information requirements of the Exchange Act and, as a result, will file periodic and current reports, proxy statements and other information with the SEC. We expect to make our periodic reports and other information filed with or furnished to the SEC available, free of charge, through our website at www.isoplexis.com as soon as reasonably practicable after those reports and other information are filed with or furnished to the SEC. Additionally, the SEC maintains an Internet site that contains such periodic and current reports, proxy statements and other information filed electronically with the SEC at www.sec.gov.

The information contained on, or that can be accessed through, our website, is not part of, and is not incorporated into, this prospectus. All website addresses in this prospectus are intended to be inactive textual references only.

ISOPLEXIS CORPORATION AND SUBSIDIARY
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of IsoPlexis Corporation

Opinion on the Financial Statements

We have audited the accompanying balance sheets of IsoPlexis Corporation (the "Company") as of December 31, 2020 and 2019, the related statements of operations, changes in redeemable convertible preferred stock and stockholders' deficit, and cash flows for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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

/s/ Deloitte & Touche LLP

Hartford, Connecticut May 13, 2021

We have served as the Company's auditor since 2020.

ISOPLEXIS CORPORATION AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS

(in thousands, except share amounts)	December 31,	
	2019	2020
Assets		
Current assets:		
Cash	\$ 27,371	\$ 106,641
Accounts receivable, net	2,846	2,922
Inventories, net	3,193	3,955
Prepaid expenses and other current assets	460	2,156
Total current assets	33,870	115,674
Property and equipment, net	2,520	3,227
Intangible assets, net	934	1,643
Other assets	562	3,061
Total assets	\$ 37,886	\$ 123,605
Liabilities, redeemable convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 1,478	\$ 2,137
Accrued expenses and other current liabilities	948	2,129
Deferred revenue	271	356
Deferred rent	17	—
Total current liabilities	2,714	4,622
Warrant liability	122	4,637
Long-term debt	—	22,137
Total liabilities:	2,836	31,396
Commitments and Contingencies (Notes 10, 13 and 14)		
Redeemable convertible preferred stock:		
Series A preferred stock, \$0.001 par value per share, 253,862 shares authorized; 253,862 shares issued and outstanding (liquidation value of \$2,684 as of December 31, 2020)	1,596	1,596
Series A-2 preferred stock, \$0.001 par value per share, 293,180 shares authorized; 290,002 shares issued and outstanding (liquidation value of \$5,584 as of December 31, 2020)	3,623	3,623
Series B preferred stock, \$0.001 par value per share, 376,061 shares authorized; 376,061 shares issued and outstanding (liquidation value of \$9,313 as of December 31, 2020)	6,606	6,606
Series B-2 preferred stock, \$0.001 par value per share, 237,183 shares authorized; 237,183 shares issued and outstanding (liquidation value of \$9,159 as of December 31, 2020)	6,991	6,991
Series C preferred stock, \$0.001 par value per share, 564,287 shares authorized; 564,287 shares issued and outstanding (liquidation value of \$29,421 as of December 31, 2020)	24,839	24,839
Series C-2 preferred stock, \$0.001 par value per share, 515,218 shares authorized; 412,174 and 515,218 shares issued and outstanding at December 31, 2019 and 2020 respectively (liquidation value of \$26,994 as of December 31, 2020)	19,929	24,929
Series D preferred stock, \$0.001 par value per share, 1,202,549 shares authorized; 0 and 975,039 shares issued and outstanding in 2019 and 2020, respectively (liquidation value of \$75,016 as of December 31, 2020)	—	74,876
Stockholders' deficit:		
Common stock, \$0.001 par value, 4,647,474 shares authorized; 260,446 and 266,738 shares issued and outstanding as of December 31, 2019 and 2020, respectively	—	—
Additional paid-in capital	606	1,153
Accumulated deficit	(29,140)	(52,404)
Total stockholders' deficit	(28,534)	(51,251)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$ 37,886	\$ 123,605

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

ISOPLEXIS CORPORATION AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share amounts)	Years ended December 31,	
	2019	2020
Revenue		
Product revenue	\$ 5,328	\$ 9,318
Service revenue	2,177	1,069
Total revenue	7,505	10,387
Cost of product revenue	2,803	4,866
Cost of service revenue	455	108
Gross profit	4,247	5,413
Operating expenses:		
Research and development expenses	10,134	11,157
General and administrative expenses	4,806	8,023
Sales and marketing	7,559	13,511
Total operating expenses	22,499	32,691
Loss from operations	(18,252)	(27,278)
Other income and (expense):		
Grant income	4,226	4,117
Research and development tax credits	411	—
Change in fair value of warrants	(10)	(85)
Interest income	—	3
Interest expense	(1)	(21)
Net loss	\$ (13,626)	\$ (23,264)
Accrued dividends on preferred stock	(1,486)	(1,979)
Net loss attributable to common stockholders	\$ (15,112)	\$ (25,243)
Basic and diluted net loss per common share	\$ (58.62)	\$ (96.61)
Weighted-average common shares outstanding—basic and diluted	257,780	261,299

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

ISOPLEXIS CORPORATION AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT

(in thousands, except share and per share amounts)	Series A Preferred		Series A-2 Preferred		Series B Preferred		Series B-2 Preferred		Series C Preferred		Series C-2 Preferred		Series D Preferred		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at January 1, 2019	253,862	\$ 1,596	290,002	\$ 3,623	376,061	\$ 6,606	237,183	\$ 6,991	505,597	\$ 22,239	—	—	—	—	255,362	—	\$ 439	\$ (15,514)	\$ (15,075)
Issuance of Preferred Stock, net of issuance cost of \$71	—	—	—	—	—	—	—	—	58,690	2,600	412,174	19,929	—	—	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,084	—	24	—	24
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	143	—	143
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(13,626)	(13,626)
Balance at December 31, 2019	253,862	\$ 1,596	290,002	\$ 3,623	376,061	\$ 6,606	237,183	\$ 6,991	564,287	\$ 24,839	412,174	19,929	—	—	260,446	—	606	(29,140)	(28,534)
Issuance of Preferred Stock, net of issuance cost of \$124	—	—	—	—	—	—	—	—	—	—	103,044	5,000	975,039	74,876	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,292	—	30	—	30
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	517	—	517
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(23,264)	(23,264)
Balance at December 31, 2020	253,862	\$ 1,596	290,002	\$ 3,623	376,061	\$ 6,606	237,183	\$ 6,991	564,287	\$ 24,839	515,218	\$ 24,929	975,039	\$ 74,876	266,738	—	\$ 1,153	\$ (52,404)	\$ (51,251)

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

ISOPLEXIS CORPORATION AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)	Years Ended December 31,	
	2019	2020
Cash flows from operating activities		
Net loss	\$ (13,626)	\$ (23,264)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	498	879
Provision for warranty costs	120	100
Change in fair value of warrants	10	85
Amortization of debt discount	1	—
Stock-based compensation	143	517
Provision for bad debt	50	—
Provision for excess and obsolete inventories	60	—
Loss on disposal of equipment	4	—
Changes in operating assets and liabilities:		
Accounts receivable	(989)	(76)
Grants receivable	274	—
Inventories	(2,551)	(762)
Prepaid expenses and other current assets	(210)	(1,696)
Other assets	70	(25)
Accounts payable	827	659
Accrued expenses and other current liabilities	341	1,081
Deferred revenue	46	85
Deferred rent	(26)	(17)
Net cash used in operating activities	(14,958)	(22,434)
Cash flows from investing activities		
Purchases of property and equipment	(1,811)	(1,442)
Payments for patents capitalized	(317)	(333)
Purchases of license	(50)	(520)
Net Cash used in investing activities	(2,178)	(2,295)
Cash flows from financing activities		
Proceeds from issuance of Series C preferred stock	2,600	—
Proceeds from issuance of Series C-2 preferred stock	20,000	5,000
Proceeds from issuance of Series D preferred stock	—	75,000
Preferred stock issuance costs	(71)	(124)
Proceeds received from long-term debt	—	25,000
Debt issuance cost paid	—	(907)
Exercise of common stock options	24	30
Payments on notes payable	(72)	—
Net cash provided by financing activities	22,481	103,999
Net change in cash	5,345	79,270
Cash beginning	22,026	27,371
Cash ending	\$ 27,371	\$ 106,641
Non-cash investing and financing activities		
Fair value of warrants issued with credit agreement	—	\$ 4,430
Fair value of loan commitment	—	\$ 2,240
Supplemental disclosure of cash flow information		
Cash paid for interest	\$ 1	\$ 21

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Nature of operations

IsoPlexis Corporation and its subsidiary (the “Company”) was incorporated in the State of Delaware in March 2013. The Company is a privately held life sciences company building solutions to accelerate the development of curative medicines and personalized therapeutics. The Company’s award-winning single-cell proteomics systems reveal unique biological activity in small subsets of cells, allowing researchers to connect more directly to in-vivo biology and develop more precise and personalized therapies. The Company’s products have been adopted by researchers around the world, including each of the top 15 global pharmaceutical companies by revenue and by approximately 45% of comprehensive cancer centers in the United States. On December 28, 2018, the Company created IsoPlexis UK Limited (IsoPlexis UK), which has remained dormant.

COVID-19

The COVID-19 pandemic has developed rapidly in 2020, with a significant number of cases. Measures taken by various governments to contain the virus have affected economic activity. The Company has taken a number of measures to monitor and mitigate the effects of COVID-19, such as safety and health measures for the Company’s employees (such as social distancing and working from home) and securing the supply of materials that are essential to the production process.

At this stage, the impact on the Company’s business and results has not been significant and based on the Company’s experience to date management expects this to remain the case. The Company will continue to follow the various government policies and advice.

Note 2 - Summary of significant accounting policies

Basis of presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted (“GAAP”) in the United States. Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASU”) promulgated by the Financial Accounting Standards Board (“FASB”).

Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, IsoPlexis UK. All intercompany transactions have been eliminated.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. The most significant estimates are those used in the determination of the fair value of warrant liabilities, useful lives of long-lived assets, and estimated fair value of common stock for purposes of recording equity-based incentive compensation.

Liquidity and ability to continue as a going concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. Management has evaluated whether there are conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date the financial statements are issued. Since its inception, the Company has incurred net losses and negative cash flows from operations.

During the years ended December 31, 2019 and December 31, 2020, the Company incurred a net loss of \$13.6 million and \$23.3 million, respectively, and used \$15.0 million and \$22.4 million in cash for operations,

respectively. In addition, as of December 31, 2020, the Company had an accumulated deficit of \$52.4 million. The Company expects to continue to generate operating losses and negative cash flows for the foreseeable future.

The Company currently expects that the cash on hand of \$106.6 million as of December 31, 2020, will be sufficient to fund its operating expenses and capital requirements for more than 12 months from the date the financial statements are available to be issued. Additional funding will be needed to finance future research and development, manufacturing, and commercial activities. To date, the Company has principally financed its operations through private placements of preferred stock. The Company will seek additional funding either through an initial public offering or through private equity and debt financings and other arrangements. There is no assurance the Company will be successful in obtaining such additional financing on terms acceptable to it, if at all, and it may not be able to enter into other arrangements. If the Company is unable to obtain funding, it could be forced to delay, reduce or eliminate the Company's research and development programs, expansion or commercialization efforts, which could adversely affect its business prospects and ability to continue operations.

The Company is subject to risks common to companies in the life sciences industry. There can be no assurance that the Company's research and development will be successful, that adequate protection for its intellectual property will be maintained, that any products developed will obtain required regulatory approval, or that any approved products will be commercially viable.

Cash

The Company maintains its cash with high-credit quality financial institutions. At times, such amounts may exceed federally insured limits.

Inventories

Inventories are stated at the lower of cost, determined by the first-in-first-out method, or net realizable value. Inventories are adjusted for estimated obsolescence and excess volumes and written down to net realizable value based upon estimates of future demand.

Product and services revenue, accounts receivable and cost of sales

On January 1, 2019, the Company adopted the provisions of ASU 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASC 606"), using the modified retrospective method. The adoption of ASC 606 had no impact on the Company's consolidated financial statements. The Company primarily generates product revenue from the sale of single cell diagnostic equipment and consumables and also generates service revenues by measuring immune responses using the Company's technology.

The Company recognizes revenue when and as control of products and services is transferred to customers in an amount that reflects the consideration the Company expects to be entitled from customers in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the transaction price, allocating the transaction prices to distinct performance obligations in the contract, and recognizing revenue when or as the performance obligations have been satisfied. Revenue recognition for contracts with multiple performance obligations is based on the separate satisfaction of each distinct performance obligation within the contract. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. The Company considers a performance obligation satisfied once the Company has transferred control of a good or service to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. The transaction price is allocated to each performance obligation in proportion to its standalone selling price. If the product or service has no history of standalone sales or if the sales volume is not sufficient, the Company estimates standalone selling price maximizing the use of observable inputs such as expected cost plus a reasonable margin and competitor pricing.

The Company contracts with its customers based on purchase orders, which are short-term single orders. The Company records revenue from sales of single cell diagnostic equipment and consumables when performance obligations under the terms of a contract with customers are satisfied, which is when control of the goods is

transferred to the customer at the time of shipment. Invoicing typically occurs upon shipment and payment is typically due within 30 days from invoice. Product returns are minimal and must be requested by the customer within 72 hours of receipt. The Company recognizes service revenue when performance obligations under the terms of a contract with customers are satisfied, which is generally at the time the analysis data from measuring immune responses using the Company's technology is made available to the customer. The Company also generates revenues through the sale of extended service type warranties, which are recognized ratably over the contract term as the Company is standing ready to provide services when and if needed.

Revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities. Employee sales commissions are recorded as sales and marketing expenses when incurred as the amortization period for such costs, if capitalized, would have been one year or less.

Cost of products and services revenue consists of labor, components and overhead costs related to the products sold and services delivered, as well as royalty expense and amortization under the license technology agreements described in Note 13.

The Company makes judgements as to its ability to collect outstanding receivables and provides allowances when collections becomes doubtful.

As of December 31, 2019 and 2020, no single customer represented 10% or more of revenue or accounts receivable.

Property and equipment

Property and equipment, including leasehold improvements, are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are provided on a straight-line basis over the estimated useful lives of the assets, ranging from three to seven years. Amortization of leasehold improvements is recorded over the shorter of the estimated useful life of the asset or remaining lease term.

The estimated useful lives of the major classes of property and equipment as generally as follows:

	Estimated Useful Lives
Furniture and equipment	5 to 7 Years
Computers and technology	3 to 5 Years
Leasehold improvements	3 to 5 Years

Patents

Costs related to filing and pursuing patent applications for products that have reached technological feasibility are capitalized and amortized over the estimated period to be benefitted, not to exceed the patent lives, which may be as long as 17 years. Patent costs are amortized as part of cost of product and service revenue. The Company periodically evaluates capitalized patent costs to determine if any amounts should be written down. Patent costs for products that have not reached technological feasibility are expensed as incurred in general and administrative expenses since recoverability of such expenditures is uncertain.

License agreements

The Company has entered into and may continue to enter into license agreements to access and utilize certain technology. The Company evaluates if the license agreement results in acquisition of an asset or a business and then determines if the acquired asset has the ability to generate revenues or is subject to regulatory approval. When regulatory approval is not required and there is a probable future benefit from the license, the Company records the license as an asset and amortizes it over the estimated economic life. The Company records the amortization as a cost of product and service revenue.

Leases

The Company records rent expense on a straight-line basis over the life of the lease. In cases of escalating rental payments, the Company records rent expense on a straight-line basis with an offset to deferred rent liability.

Shipping and handling

Shipping and handling expenses are included in cost of product revenue.

Research and development state tax credits

Research and development (R&D) tax credits exchanged for cash pursuant to the Connecticut R&D Tax Credit Exchange Program, which permits qualified small business engaged in R&D activities within Connecticut to exchange their unused R&D tax credits for a cash amount equal to 65% of the value of exchanged credits, are recorded as a receivable and other income in the year the R&D tax credits relate to, as it is reasonably assured that the R&D tax credits will be received, based upon the Company's history of filing for and receiving the tax credits. R&D tax credits receivable where cash is expected to be received by the Company more than one year after the balance sheet date are classified as noncurrent in the consolidated balance sheets.

Loan commitment

The Company's Credit Agreement (see Note 7) contains a commitment from the lender for a second tranche of debt under certain conditions. The Company has determined the commitment represents a freestanding financial instrument under the definition provided within the ASC Glossary, and therefore has initially recorded it at fair value, with changes in fair value each period recorded in earnings. The balance of \$2.2 million is included in other assets in the consolidated balance sheet at December 31, 2020.

Debt issuance costs

The costs associated with obtaining debt financing, including loan origination fees and legal costs, are offset against the related debt and amortized over the term of the related debt. For debt issuances with multiple tranches, the issuance costs related to unissued tranches are classified within other assets until the proceeds are received. As of December 31, 2019 and 2020, there were \$0.0 and \$0.9 million of deferred debt issuance costs, respectively.

Deferred offering costs

The Company capitalizes certain direct and incremental legal, professional accounting and other third-party fees associated with in-process equity financings as deferred offering costs until such equity financings are consummated. After consummation of the equity financing, these costs are recorded as a reduction of the carrying value of the common or preferred stock generated as a result of the equity financing. Should the in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the consolidated statements of operations. As of December 31, 2019 and 2020, there were no deferred equity offering costs.

Detachable warrants

The Company accounts for detachable warrants as freestanding financial instruments in accordance with ASC No. 480, Distinguishing Liabilities from Equity, which requires the Company to separately account for the detachable warrants at fair value. The fair value used for the warrants is calculated using the Black-Scholes valuation model. See Notes 3 and 7.

Fair value measurements

The fair value of assets and liabilities are based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value maximize the use of observable inputs and minimize the use of unobservable inputs. The Company uses a fair

value hierarchy with three levels of inputs, of which the first two are considered observable and the last unobservable, to measure fair value:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Inputs, other than Level 1, that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that valuation is based on models or inputs that are less observable in the market, the determination of fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Financial instruments measured at fair value on a recurring basis include loan commitment assets and warrant liabilities (Note 3). The fair value was determined based on Level 3 inputs as described in Note 3. An entity may elect to measure many financial instruments and certain other items at fair value at specified election dates. The Company did not elect to measure any additional financial instruments or other items at fair value.

There have been no changes to the valuation methods utilized by the Company during the years ended December 31, 2019 or 2020. The company evaluates transfers between levels at the end of each reporting period. There were no transfers of financial instruments between levels during the years ended December 31, 2019 or 2020.

The carrying amounts of financial instruments such as cash, accounts receivable, prepaid expenses and other current assets, accounts payable, and accrued liabilities approximate the related fair values due to the short-term maturities of these instruments. The carrying amount of the Company's debt under the Credit Agreement as of December 31, 2020 was determined to approximate fair value as the agreement was entered into on December 30, 2020.

Income taxes

The Company has adopted the accounting guidance within ASC Topic 740 on uncertainties in income taxes. ASC Topic 740, Income Taxes, prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

Deferred income tax assets and liabilities are recognized for the expected future tax consequences attributed to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the enacted tax rates expected to be applied to taxable income in the years in which those temporary differences are expected to reverse. Deferred income taxes result primarily from temporary differences between the recognition of depreciation and certain other expenses for both financial statement and income tax reporting purposes as well as net operating loss and tax carryforwards. Valuation allowances are recorded to reduce deferred income tax assets when it is more likely than not that a tax benefit will not be realized.

The Company has no unrecognized tax benefits at December 31, 2019 and 2020 and its income tax returns after 2016 are subject to audit by the applicable taxing authorities. The Company will recognize any interest and penalties associated with tax matters as part of income tax expense.

Stock-based compensation

The Company measures stock option awards made to employees and directors based on the estimated fair values of the awards and recognize the compensation expense over the requisite service period. ASC 718, Stock Compensation, requires the recognition of stock-based compensation expense, using a fair value-based method, for costs related to all stock options granted. The Company's determination of the fair value of stock options with time-based vesting on the date of grant utilizes the Black-Scholes option-pricing model, and is impacted by the estimated

fair value of its common stock as well as other variables including, but not limited to, the expected term that stock options will remain outstanding, the expected common stock price volatility over the term of the stock option, risk-free interest rates and expected dividends.

The fair value of stock options is recognized over the period during which an optionee is required to provide services in exchange for the stock option award, known as the requisite service period on a straight-line basis. Stock-based compensation expense is recognized based on the fair value determined on the date of grant and is reduced for forfeitures as they occur. The grant date is determined based on the date when a mutual understanding of the key terms of the stock option awards are established.

Due to the lack of a public market for the Company's common stock and lack of Company-specific historical implied volatility data, the Company has based its computations of expected volatility on the historical volatility of a representative group of public companies with similar characteristics of the Company, including stage of product development and life science industry focus. The historical volatility is calculated based on a period of time commensurate with the expected term assumption. The Company uses the simplified method as prescribed by the U.S. Securities and Exchange Commission ("SEC") Staff Accounting Bulletin No. 107, Share-Based Payment, to calculate the expected term for options granted to employees and non-employees, whereby, the expected term equals the arithmetic average of the vesting term and the original contractual term of the options due to its lack of sufficient historical data. The risk-free interest rate is based on U.S. Treasury securities with a maturity date commensurate with the expected term of the associated award. The expected dividend yield is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on its common stock.

Due to the absence of an active market for the Company's common stock, the Company utilizes methodologies in accordance with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation, to estimate the fair value of its common stock. The estimated fair value of the Company's common stock has been determined at each grant based upon a variety of factors, including the illiquid nature of the common stock, arm's-length sales of the Company's capital stock (including redeemable convertible preferred stock), the effect of the rights and preferences of the preferred shareholders, and the prospects of a liquidity event. Among other factors are the Company's financial position and historical financial performance, the status of technological developments within the Company's research, the composition and ability of the current research and management team, an evaluation or benchmark of the Company's competition, and the current business climate in the marketplace. Significant changes to the key assumptions underlying the factors used could result in different fair values of common stock at each valuation date.

Impairment of long-lived and intangible assets

The Company evaluates the recoverability of its long-lived assets, which include property and equipment and intangible assets, whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable. Recoverability of an asset or asset group is measured by comparison of its carrying amount to the expected future undiscounted cash flows that the asset or asset group is expected to generate. If that review indicates that the carrying amount of the long-lived asset or asset group is not recoverable, an impairment loss is recorded in the amount by which the carrying amount of the asset or asset group exceeds its fair value. There were no impairment indicators in 2019 or 2020.

Preferred stock

The Company records all shares of preferred stock at their respective fair values less issuance costs on the dates of issuance. The preferred stock is recorded outside of stockholders' deficit because, in the event of certain deemed liquidation events, which are events that are not considered solely within the Company's control, such as a merger, acquisition or sale of all or substantially all of the Company's assets, the preferred stock will become redeemable. In the event of a change of control of the Company, proceeds received from the sale of such shares will be distributed in accordance with the liquidation preferences set forth in the Company's Amended and Restated Certificate of Incorporation unless the holders of preferred stock have converted their shares of convertible preferred stock into shares of common stock. Preferred stock is not currently redeemable or probable of becoming redeemable.

Derivatives

Upon issuing financial instruments, the Company assesses whether the nature of the host contract and any of the features embedded within the financial instrument could be considered derivatives that require bifurcation. In determining whether the embedded features represent derivatives that could require bifurcation, the Company assesses whether the economic characteristics of embedded features are not clearly and closely related to the economic characteristics and risks of the remaining component of the financial instruments (i.e., the host contracts), whether the instrument is measured at fair value with changes in fair value reported in earnings as they occur and whether a separate, non-embedded instrument with the same terms as the embedded instruments would meet the definition of a derivative instrument. When it is determined that all of the criteria above are met, the embedded derivative is separated from the host contract and carried at fair value with any changes in fair value recorded in current period earnings.

Research and development costs

Research and development expenses consist of costs incurred to develop an automated method and instrument and consumable assay (platform) that proves feasibility and expands the capability of the Company's technology. Research and development expenses include personnel costs for the Company's research and product development employees, as well as non-personnel costs such as facilities and overhead costs attributable to research and development, and professional fees payable to third parties for research services. Research and development costs are expensed as incurred.

Product warranties

The Company generally provides a one-year warranty on instruments. At the time revenue is recognized, an accrual is established for estimated warranty expenses based on historical experience as well as anticipated product performance. The Company periodically reviews the warranty reserve for adequacy and adjusts the warranty accrual, if necessary, based on actual experience and estimated costs to be incurred. Warranty expense is recorded as a component of cost of product revenue. Product warranties are meant to ensure all the Company's instruments are operating effectively and based on the terms of the purchase or service agreement.

Grant income and receivable

The Company recognizes income earned under cost-plus-fixed-fee grants from the federal government within the statements of operations as grant income. Grant income is recognized as allowable costs are incurred and fees are earned. Amounts requested for payment from the government related to the grant agreements that have not been collected are stated at the outstanding balance, less an allowance for bad debt, if necessary. The Company has no grants receivable balance as of December 31, 2019 or 2020.

Net loss per share attributable to common stockholders

The Company calculates basic net loss per share and diluted net loss per share using the weighted-average number of shares of common stock outstanding for the period. Net loss per share attributable to common stockholders is calculated using the two-class method, which is an earnings allocation formula that determines net loss per share for the holders of shares of the Company's common stock and participating securities. The Company's preferred stock contains a cumulative annual dividend right whether or not declared, which after consideration increases the net loss available to common stockholders. The Company's preferred stock also contains participation rights in any dividend paid by the Company as well as residuals in liquidation and were deemed to be participating securities. The participating securities do not include a contractual obligation to share in losses of the Company and are not included in the calculation of net loss per share in the periods in which net loss is recorded. Except where the result would be antidilutive to net income (loss), diluted net income (loss) per share is computed assuming the exercise of common stock options and the conversion of outstanding shares of preferred stock.

Segment information

Operating segments are defined as components of an enterprise for which discrete financial information is available for evaluation by the chief operating decision maker (CODM) in deciding how to allocate resources and in assessing operating performance. The Company manages its operations as a single segment for the purposes of allocating resources, assessing performance, and making operating decisions. For revenue by geographic area see Note 4.

New accounting standards not yet effective

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). This standard established a right-of-use model that requires all lessees to recognize right-of-use assets and liabilities on their balance sheet that arise from leases as well as provide disclosures with respect to certain qualitative and quantitative information related to their leasing arrangements. The Company plans to adopt the standard on January 1, 2022, using a modified retrospective transition approach to be applied to leases existing as of, or entered into after, January 1, 2022. The Company has not yet determined the impact the adoption of this standard will have on the consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This standard requires that credit losses be reported using an expected losses model rather than the incurred losses model that is currently used, and establishes additional disclosures related to credit risks. For available-for-sale debt securities with unrealized losses, this standard now requires allowances to be recorded instead of reducing the amortized cost of the investment. This standard will be effective for the Company on January 1, 2023. The Company has not yet determined the impact the adoption of this standard will have on the consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Reference Rate Reform (Topic 848) (“ASU 2020-04”), which provides companies with temporary optional financial reporting alternatives to ease the potential burden in accounting for reference rate reform and includes a provision that allows companies to account for a modified contract as a continuation of an existing contract. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. The Company has certain debt instruments for which the interest rates are indexed to LIBOR, and as a result, is currently evaluating the effect that the implementation of this standard will have on the Company’s consolidated operating results, cash flows, financial condition and related disclosures.

Note 3 - Fair Value Measurement

Certain of the Company’s assets and liabilities are recorded at fair value, as described below.

The following tables set forth the Company’s financial instruments that were measured at fair value on recurring basis by level within the fair value hierarchy:

(in thousands)	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$ —	\$ —	\$ 122	\$ 122

(in thousands)	December 31, 2020			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$ —	\$ —	\$ 4,637	\$ 4,637
Loan commitment asset	—	—	2,240	2,240

Under ASC Topic 480, Distinguishing Liabilities from Equity, the warrants (see Note 7) are freestanding financial instruments that qualify as liabilities required to be recorded at their estimated fair value at the inception date and remeasured at each reported balance sheet date thereafter until settlement.

The fair value of the warrant liability was estimated using a Black-Scholes Option Pricing Model, with the following significant unobservable inputs (Level 3):

	December 31, 2019		December 31, 2020	
	Series A-2	Series A-2	Series D	Series D
Stock price	\$ 48.52	\$ 76.92	\$ 76.92	\$ 76.92
Exercise price	\$ 12.29	\$ 12.59	\$ 76.92	\$ 76.92
Expected term (in years)	5.7	4.7	10	10
Volatility	50 %	50 %	50 %	50 %
Dividend rate	—	—	—	—
Risk-free interest rate	1.76 %	0.36 %	0.93 %	0.93 %

The Company's volatility was estimated at each valuation date based on the price history for guideline companies looking back over the number of years equal to the expected term. During the periods presented, the Company has not changed the manner in which it values assets and liabilities that are measured at fair value. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers within the hierarchy during the years ended December 31, 2019 and 2020.

The commitment for a second tranche under the Credit Agreement (see Note 7) qualifies as a freestanding financial instrument required to be recorded at estimated fair value. The fair value of the loan commitment was estimated based on the present value of future expected cash flows discounted at the Company's effective interest rate of 13.98%. As the Credit Agreement was signed on December 30, 2020, the loan commitment is excluded from the Level 3 roll forward below.

The following table presents changes during the years ended December 31, 2019 and 2020 in Level 3 liabilities measured at fair value on a recurring basis:

(in thousands)	Series D Warrants	Series A Warrants
Balances at January 1, 2019	\$ —	\$ 112
Change in estimated fair value	—	10
Balances at December 31, 2019	—	122
Issuance	4,430	—
Change in estimated fair value	—	85
Balances at December 31, 2020	\$ 4,430	\$ 207

The above fair value measurements are sensitive to changes in underlying unobservable inputs. A change in those inputs could result in a significantly higher or lower fair value measurement.

Changes in fair value of the warrants is included in other expense in the statements of operations.

Note 4 - Revenue

The Company's revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and consumables used in single cell research equipment. Service and other revenue primarily consists of revenue generated from measuring immune responses using the Company's technology.

Revenue by source

(in thousands)	Year Ended December 31,	
	2019	2020
Instruments	\$ 4,818	\$ 7,432
Consumables	510	1,886
Extended service warranty	18	357
Other service revenue	2,159	712
Total Revenue	\$ 7,505	\$ 10,387

Revenue by geographic area

Based on region of destination (in thousands)	Years Ended December 31,	
	2019	2020
Americas ⁽¹⁾	\$ 6,224	\$ 7,558
Europe ⁽²⁾	928	878
Greater China ⁽³⁾	253	1,129
Asia-Pacific ⁽⁴⁾	100	822
Total Revenue	\$ 7,505	\$ 10,387

(1) Region includes revenue from the United States of America

(2) Region includes revenue from the United Kingdom, Belgium, Portugal, Germany, Sweden, and Switzerland

(3) Region includes revenue from China and Taiwan

(4) Region includes revenue from Singapore, Japan and Korea

Performance obligations

The Company regularly enters into contracts with multiple performance obligations. Most performance obligations are generally satisfied within a short time after the contract execution date. As of December 31, 2020, the aggregate amount of the transaction price allocated to remaining performance obligations was \$0.4 million, of which substantially all is expected to be recognized as revenue during 2021.

Contract balances

Contract balances represent amounts presented in the consolidated balances sheets when either the Company has transferred goods or services to the customer, or the customer has paid consideration to the Company under the contract. These contract balances included accounts receivable (see Note 5) and deferred revenue. Accounts receivable balances represent amounts billed to customers for goods and services when the Company has an unconditional right to payment of the amount billed. Deferred revenue, as of December 31, 2019 and December 31, 2020 was \$0.3 million and \$0.4 million respectively. Deferred revenue represents cash consideration received from customers for which all services or products have not yet been transferred. Revenue recorded in 2020 included \$0.3 million of previously deferred revenue that was included in contract liabilities as of December 31, 2019.

Note 5 - Supplemental Balance Sheet Details

Accounts receivable, net consists of the following:

(in thousands)	December 31,	
	2019	2020
Accounts receivable	\$ 2,896	\$ 2,972
Allowance for doubtful accounts	(50)	(50)
Total accounts receivable, net	\$ 2,846	\$ 2,922

(in thousands)	December 31,	
	2019	2020
Allowance for doubtful accounts, beginning of year	\$ —	\$ 50
Write-offs of uncollectable accounts	—	—
Provision for allowance for doubtful accounts	50	—
Allowance for doubtful accounts, end of year	\$ 50	\$ 50

Inventories, net consists of the following:

(in thousands)	December 31,	
	2019	2020
Raw materials	\$ 2,747	\$ 3,631
Work in process	252	28
Finished good	254	356
Reserve for excess and obsolete inventory	(60)	(60)
Total Inventories, net	\$ 3,193	\$ 3,955

Property and equipment, net consist of the following:

(in thousands)	December 31,	
	2019	2020
Furniture and equipment	\$ 2,009	\$ 2,848
Computers and technology	992	1,453
Leasehold improvements	555	698
Total	3,556	4,999
Accumulated depreciation	(1,036)	(1,772)
Property and equipment, net	\$ 2,520	\$ 3,227

Depreciation expense was \$0.5 million and \$0.7 million for the years ended December 31, 2019 and 2020, respectively.

Accrued expenses and other current liabilities consist of the following:

(in thousands)	December 31,	
	2019	2020
Accrued compensation	\$ 183	\$ 867
Accrued unvouchered expenses	680	1,081
Other, including product warranties	85	181
Total accrued liabilities	\$ 948	\$ 2,129

Note 6 - Intangible assets

Intangible assets consist of the following:

(in thousands)	December 31, 2019			
	Remaining Useful Life (Years)	Gross	Accumulated Amortization	Net
Patents	9 - 14	\$ 849	\$ 22	\$ 827
Capitalized Licenses	3 - 6	150	43	107
Total intangible assets		\$ 999	\$ 65	\$ 934

(in thousands)	December 31, 2020			
	Remaining Useful Life	Gross	Accumulated Amortization	Net
Patents	8 - 14	\$ 1,182	\$ 52	\$ 1,130
Capitalized Licenses	2 - 5	670	157	513
Total intangible assets		\$ 1,852	\$ 209	\$ 1,643

During 2020 the Company acquired an additional license for \$0.5 million with useful life of 5 years.

Amortization expense was \$0.1 million for each of the years ended December 31, 2019 and 2020. The amortization of intangible assets is recognized in cost of product and service revenue.

The estimated annual amortization of intangible assets for the next five years is shown in the following table. Actual amortization expense to be reported in future periods could differ from these estimates as a result of acquisitions, divestitures, and asset impairments, among other factors.

Year (in thousands)	Estimated Annual Amortization
2021	\$ 154
2022	154
2023	134
2024	134
2025	51

Note 7 - Debt

On September 15, 2015, the Company received a \$0.4 million loan from Connecticut Innovations, Inc. ("CII"). The loan matured on March 15, 2019 and was repaid in full. The interest rate on the loan was 8% per year compounded monthly. The loan was secured by all of the Company's assets.

In connection with the issuance of the loan, the Company also issued to CII warrants to purchase 3,178 shares of Series A-2 preferred stock. The warrants have a contractual life that expires on September 15, 2022. The exercise price is \$12.58608 per warrant share.

On December 30, 2020, the Company closed on a \$50.0 million Credit Agreement, of which the Company borrowed \$25.0 million immediately upon closing. An additional \$25.0 million remains available through March 31, 2022 subject to a revenue milestone, defined as total revenue of at least \$20.0 million over the twelve-month period most recently ended.

The Credit Agreement bears interest at the one-month Libor, with a 1.75% floor, plus a 9.50% margin (11.25% at December 31, 2020). Monthly payments of interest-only are due over the term of the loan with no schedule loan amortization. Amounts borrowed are due and payable on the maturity date, December 30, 2025. The loan is secured by substantially all of the Company's assets. Financial covenants include a \$3.0 million minimum cash balance at all times and minimum revenue amounts, which range from \$15.0 million for the twelve-month period ended June 30, 2021 to \$46.8 million for the twelve-month period ended June 30, 2023 and are measured on a quarterly basis.

In connection with the Credit Agreement closing, the Company issued to the lender warrants to purchase 97,504 shares of Series D preferred stock. The warrants have a 10-year contractual life and an exercise price of \$76.92 per warrant share. The fair value at issuance was estimated at \$4.4 million and was recorded as a warrant liability. In addition, given that the Credit Agreement contains a second tranche of potential borrowings, the Company identified and recorded within other assets on the balance sheet a \$2.2 million asset related to the future loan commitment. The Company determined that the loan commitment meets the definition within ASC 480 as a freestanding financial instrument to be recorded at fair value given that it is both (1) legally detachable per the explicit ability provided to the creditor allowing it to assign all or part of its interest under the Credit Agreement to any person or entity; and (2)

separately exercisable given that it can be exercised or not exercised at the Company's option without impacting the outstanding balance of the original \$25.0 million borrowed upon execution of the Credit Agreement. The remaining proceeds were allocated to the value of the initial debt borrowed and the discount resulting on such debt will be amortized over the term of the Credit Agreement.

Note 8 - Equity

Common stock

As of December 31, 2019 and 2020, the Company had authorized 4,647,474 shares of common stock, \$0.001 par value per share ("Common Stock"), of which a total of 260,446 shares and 266,738 shares were outstanding, respectively.

Preferred stock

All Series of preferred stock are collectively referred to as the "Preferred Stock". Under the Amended and Restated Certificate of Incorporation dated December 30, 2020, the significant rights and preferences of the outstanding Preferred Stock of the Company include:

Voting rights

Each holder of Preferred Stock is entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held are convertible. The holders of Preferred Stock vote together with the holders of Common Stock as a single class.

Dividends

The Preferred Stock accrues dividends at a rate of 8% per annum on the original issue price. Dividends are cumulative and accrue whether declared or not. The Company is under no obligation to pay the dividends unless in the event of a triggering event. A triggering event includes an initial public offering of Common Stock and as specified by written consent or vote of the holders of the majority of the then-outstanding shares of Preferred Stock, voting together as a single class. As of December 31, 2020, the cumulative, accrued dividends totaled \$14.2 million.

Liquidation preference

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or a Deemed Liquidation Event, as defined below, (and after payment of all liabilities and all costs incurred in connection with the Deemed Liquidation Event or setting aside of monies sufficient to cover such liabilities and costs), the net assets in cash, shares or other assets ("Liquidation Proceeds") shall be distributed in the following order:

- 1) First, the holders of Preferred Stock (if necessary, on a pro rata basis) shall, in preference to any other outstanding securities, receive an amount equal to the original subscription price paid, plus accrued but unpaid dividends.
- 2) Second, any remaining Liquidation Proceeds shall be distributed among the holders of the shares of Preferred Stock and Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been mandatorily converted to Common Stock pursuant to the terms of the Amended and Restated Certificate of Incorporation.

Deemed liquidation event

A "Deemed Liquidation Event" means (i) a merger or consolidation in which the Company is a constituent party or a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, (ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or any subsidiary of the Company of all or substantially all the assets of the Company and its subsidiaries taken as a whole, or (iii) a transaction or series of related transactions to which the Company is a party (including without limitation, any acquisition of capital stock,

reorganization, merger, or consolidation, but excluding any merger effected exclusively for the purpose of changing the domicile of the Company) in which an entity or person, or a group of related persons or entities, acquires from one or more stockholders of the Company, capital stock or other equity securities representing at least a majority of the outstanding voting power of the Company.

Redemption rights

The Preferred Stock is not redeemable by the Company, except in connection with a Deemed Liquidation Event as defined above.

Optional conversion

Each share of Preferred Stock is convertible, at the option of the holder, into shares of Common Stock at a ratio equal to the original applicable issuance price divided by the applicable conversion price in effect at the time of conversion (initially equal to the applicable original issue price, adjusted going forward for any dilutive issuances, stock splits or similar events).

Mandatory conversion

Each share of Preferred Stock shall automatically convert into shares of Common Stock at the then applicable conversion rate upon (i) vote by the holders of the majority the then-outstanding shares of Preferred Stock, voting together as a single class, and the then-outstanding shares of Series D Preferred Stock or, (ii) an initial public offering of Common Stock at a price of at least \$115.38 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to Common Stock) and a proposed offering size of at least \$50.0 million. As of December 31, 2020, shares of Preferred Stock would be convertible to 3,211,652 shares of Common Stock.

Directors

The preferred shareholders are entitled to elect five directors out of the nine directors of the Board.

Put agreement

In connection with the issuance of the Preferred Stock, the Company entered into a put agreement (the "Put Agreement") with a stockholder that allows the stockholder to redeem its shares of Preferred Stock at the current market price or the original purchase price plus a return, all as defined in the Put Agreement. The stockholder can put the stock only if the Company moves out of the State of Connecticut and the stockholder's put rights terminate once such stock is freely saleable to the public pursuant to a public registration. At this time, the Company has no plan to move out of the State of Connecticut in the foreseeable future, which is within the Company's control, therefore the Company has determined that there is no value in the put option due to the remote likelihood of exercisability.

Note 9 - Equity based compensation

The Company's 2014 Stock Plan (the "Plan") provides for the granting of stock options or restricted stock to key employees, officers, directors and consultants. The Board of Directors, at its sole discretion, shall determine the exercise price. Stock options expire 10 years from the date of grant. The stock options generally vest 25% upon the one-year anniversary of the service inception date and then ratably each month over the remaining 36 months. Upon termination of service, any unvested stock options are automatically returned to the Company. Vested stock options that are not exercised within the specified period, according to the terms and conditions of the option plan, following the termination as an employee, consultant, or service provider to the Company are surrendered back to the Company. Those stock options are added back to the pool and made available for future grants. The maximum number of shares of common stock reserved under the Plan is 960,420. Compensation cost is recorded on a straight-line basis over the requisite service period of the award based on the fair value of the options issued on the measurement date.

The following table summarizes stock option activity for the year ended December 31, 2020:

	Stock Options			
	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (In thousands)
Outstanding as of December 31, 2019	308,947	\$ 5.05	7.5	
Granted	115,950	8.22		
Forfeited	(33,992)	7.63		
Exercised	(6,292)	5.12		
Outstanding as of December 31, 2020	<u>384,613</u>	\$ 5.78	7.2	\$ 3,409
Vested and expected to vest as of December 31, 2020	384,613	\$ 5.78	7.2	\$ 3,409
Exercisable at December 31, 2020	285,450	\$ 5.25	6.4	\$ 3,161

The following table summarizes stock-based compensation expense, and also the allocation within the consolidated statements of operations:

(in thousands)	Years Ended December 31,	
	2019	2020
Research and development	\$ 25	\$ 35
General and administrative	107	455
Sales and marketing	11	27
Total stock-based compensation expense	<u>\$ 143</u>	<u>\$ 517</u>

The weighted-average grant-date fair value of stock options awarded during the years ended December 31, 2019 and 2020 was approximately \$4.21 per share and \$4.65 per share, respectively. The aggregate grant date fair value of stock options vested during the years ended December 31, 2019 and 2020 were \$0.1 million and \$0.4 million, respectively. As of December 31, 2020, there was a total of \$0.4 million of unrecognized employee compensation costs related to non-vested stock option awards expected to be recognized over a weighted average period of 2.6 years.

The Company estimates the fair value of stock-based compensation utilizing the Black-Scholes option pricing model, which is dependent upon several variables, such as expected term, volatility, risk-free interest rate, and expected dividends. Each of these inputs is subjective and generally requires significant judgment to determine.

The following table summarizes the range of key assumptions used to determine the fair value of stock options granted during:

	Years Ended December 31,	
	2019	2020
Risk-free interest rate	1.70 %	0.22 %
Expected term (in years)	7	7
Expected volatility	50 %	50 %
Expected dividend yield	—	—
Exercise price	\$7.70 - \$8.22	\$8.22
Estimated fair value of common stock	\$7.70 - \$8.22	\$8.22 - \$12.00

The risk-free interest rate assumption was based upon observed interest rates appropriate for the expected term of the stock options. The expected volatility was calculated based on comparable public companies. The expected

term is based on the average of the vesting period and the legal term. The Company has not declared any dividends in its history and does not expect to issue dividends over the life of the stock options and therefore has estimated the dividend yield to be zero.

Note 10 - Operating leases

The Company has multiple operating lease commitments for office space and equipment, which expire through 2026. The future rental payments required by the Company under the operating leases are approximately as follows:

(in thousands)	Years Ended December 31	
2021	\$	1,105
2022		1,013
2023		940
2024		871
2025		716
Thereafter		292
Total	\$	4,937

The rent expense for the years ended December 31, 2019 and 2020 was approximately \$0.8 million and \$0.9 million, respectively.

Note 11 - Product warranties

The Company warrants certain products generally for periods of one year following the delivery date. Accrued warranty costs are included in accrued expenses and other current liabilities.

(in thousands)	December 31,	
	2019	2020
Accrued warranty costs, beginning of year	\$ 25	\$ 85
Cost of warranty services during the year	(60)	(50)
Estimated provision for warranty costs	120	100
Accrued warranty costs, end of year	\$ 85	\$ 135

Note 12 - Income taxes

For the years ended December 31, 2019 and 2020, the Company did not have a current or deferred income tax expense or benefit as the Company has incurred losses since inception.

The effective tax rate for the Company for years ended December 31, 2019 and 2020 was zero percent. A reconciliation of the anticipated income tax rate by applying the statutory federal income tax rate of 21% to income before taxes to the amount reported in the statement of operations is as follows:

	Years Ended December 31,	
	2019	2020
U.S. statutory federal income tax rate	21.0 %	21.0 %
State income taxes (net of federal benefit)	4.9 %	4.5 %
Research and development tax credits	3.3 %	— %
Non-deductible expenses	(0.1)%	— %
Change in valuation allowance	(29.1)%	(25.5)%
Effective income tax rate	— %	— %

The tax effects of temporary difference and carryforwards that give rise to significant portions of the net deferred tax assets were as follows:

(in thousands)	December 31,	
	2019	2020
Deferred tax assets:		
Stock based compensation	\$ 55	\$ 172
Other accruals	43	64
Deferred revenue	60	78
Inventory adjustments	26	26
Intangible assets	4	5
Net operating losses	7,537	13,278
Federal and State tax credits	973	928
Total deferred tax assets	8,698	14,551
Valuation allowance	(8,631)	(14,489)
Deferred tax assets, net of valuation allowance	67	62
Deferred tax liabilities:		
Depreciation and amortization	(67)	(62)
Total deferred tax liabilities	(67)	(62)
Deferred tax assets and liabilities, net of valuation allowance	\$ —	\$ —

As of December 31, 2020, the Company had net operating loss carryforwards for federal purposes of approximately \$12.7 million, which expire at various dates through 2033 and approximately \$38.0 million which have no expiration. The Company also had state net operating loss carryforwards of approximately \$44.2 million, which expire at various dates through 2042. The Company had federal research and development tax credit carryforwards available to offset future federal income taxes of approximately \$0.7 million and state of Connecticut research and development tax credit carryforwards available to offset future state income taxes of approximately \$0.3 million.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted which included provisions related to NOL carryovers and carrybacks. The CARES Act amended the NOL carryback rules by allowing NOLs arising in tax years beginning after December 31, 2017 and before January 1, 2021 to be carried back to each of the 5 years preceding the year of the loss to generate a refund of previously paid income taxes. In addition, the CARES Act temporarily removed the 80% limitation under which NOLs generated post-2017 could be used to offset no more than 80% of taxable income, and allows for full use of such NOLs for tax years before January 1, 2021. The Company has evaluated the relevant provisions of the CARES Act and has determined that it does not expect to recognize any income tax benefit related to these provisions due to its net operating losses in the current year and all prior years.

The Company's valuation allowance increased during 2020 by \$5.9 million primarily due to the generation of net operating losses.

Future realization of the tax benefits of existing temporary differences and net operating loss carryforwards ultimately depends on the existence of sufficient taxable income within the carryforward period. As of December 31, 2019 and 2020, the Company performed an evaluation to determine whether a valuation allowance was needed. The Company considered all available evidence, both positive and negative, which included the results of operations for the current and preceding years. The Company determined that it was not possible to reasonably quantify future taxable income and determined that it is more likely than not that all of its deferred tax assets will not be realized. Accordingly, the Company maintained a full valuation allowance as of December 31, 2019 and 2020.

Under Internal Revenue Code Section 382, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income

may be limited. Generally, an ownership change occurs when certain shareholders increase their aggregated ownership by more than 50 percentage points over their lowest ownership percentage in a testing period (typically three years). The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since becoming a “loss corporation” as defined in Section 382. Future changes in stock ownership, which may be outside of the Company’s control, may trigger an ownership change. In addition, future equity offerings or acquisitions that have an equity component of the purchase price could result in an ownership change. If an ownership change has occurred or does occur in the future, utilization of the NOL carryforwards or other tax attributes may be limited, which could potentially result in the expiration of a portion of the federal and state net operating losses and tax credit carryforwards before utilization, the reduction of the Company’s gross deferred tax assets and corresponding calculation allowance, and increased future tax liability to the Company.

As of December 31, 2019 and 2020, the Company did not have any unrecognized tax benefits. The Company has completed a study for the research and development credit carryforwards through December 31, 2019, and has not yet completed a study of research and development credit carryforwards for the year ended December 31, 2020. This study, once completed, may result in an adjustment to the Company’s research and development credit carryforwards; however, until the study is completed, and any adjustment is known, no amounts are being presented as an uncertain tax position. A full valuation allowance has been provided against the Company’s research and development credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the balance sheets or statements of operations if an adjustment were required.

To the extent penalties and interest would be assessed on any underpayment of income tax, the Company’s policy is that such amounts would be accrued and classified as a component of income tax expense in the financial statements. As of December 31, 2019 and 2020, the Company had no accrued interest or penalties related to uncertain tax positions.

The Company files U.S. federal and multiple state income tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. There are currently no pending tax federal or state income tax examinations. As a result of the Company’s net operating loss carryforwards, the Company’s federal and state statutes of limitations remain open for all years until the net operating loss carryforwards are utilized or expire prior to utilization.

Additionally, as a result of legislation in the State of Connecticut, companies have the opportunity to exchange certain research and development tax credit carryforwards for a cash payment of 65% of the research and development tax credits. The research and development expenses that qualify for Connecticut credits are limited to those costs incurred within Connecticut. The Company has elected to participate in the exchange program and, as a result, has recognized net benefits of \$0.4 million for the year ended December 31, 2019, which is included in non-operating income in the accompanying statements of operations. The Company does not expect to utilize the exchange program for the year ended December 31, 2020.

Note 13 - Technology license agreements

Yale Agreement

On April 25, 2014, the Company entered into a License Agreement (the “Yale Agreement”) with Yale University. The Yale Agreement provides the Company with exclusive rights to the use of certain patented technology for a period expiring on the later of (i) the expiration of all patent claims licensed to the Company on a country-by-country basis, or (ii) ten years from the date of first sale of the licensed product in such country. After that, the license will become non-exclusive.

During the remaining term of the Yale Agreement, the Company is required to pay a customary annual license maintenance royalty (“LMR”), as well as low single-digit earned royalties on worldwide cumulative net sales of licensed products, which royalties are subject to reduction upon the occurrence of certain events specified in the Yale Agreement. The LMR is credited against earned royalties due by the Company in the same calendar year. For

the years ended December 31, 2019 and 2020, the Company incurred an immaterial amount in royalty expense pursuant to the Yale Agreement. The amount is included in cost of revenue in the accompanying statements of operations.

In connection with entering into the Yale Agreement, the Company issued 7,772 shares of Series A preferred stock to Yale University in 2014.

The Company amended the Yale Agreement in January 2018 to include certain patent rights. In consideration for the inclusion of these patent rights, the Company agreed to issue 3,374 shares of Series B-2 Preferred Stock to Yale in 2018.

Caltech Agreement

On March 8, 2017, the Company entered into a License Agreement with California Institute of Technology (“Caltech”) (the “Caltech Agreement”). The Caltech Agreement provides the Company with exclusive rights to certain patents and non-exclusive rights to certain technology, in each case as defined therein. The Caltech Agreement will continue until the related patent rights expire.

During the term of the Caltech Agreement, the Company is required to pay a royalty on the exclusively licensed patent rights at a low single-digit percentage of net revenue, as defined in the Caltech Agreement, until the expiration of all patent claims on a country-by-country basis, and on the non-exclusively licensed technology at a lower single-digit percentage of net revenue, for a period of ten years from the first commercial sale. In the event that the Company fails to commercialize products that incorporate the licensed patents or technology, the annual minimum royalties due to Caltech will increase in accordance with the terms of the Caltech Agreement. The Company is also required to pay Caltech a mid-teen percentage of sublicensing revenue. In connection with entering into the Caltech Agreement, the Company issued 2,830 shares of Series B preferred stock to Caltech in 2018.

License and Supply and Non-Exclusive License Agreements

The Company is party to certain license and supply agreements that provide the Company with commercial access rights to certain supplies. Under certain of the Company’s supply agreements, the Company is required to make annual minimum purchases of supplies (with such minimums ranging from \$25,000 per year to \$500,000 per year under the applicable agreements) during the terms of such agreements, which ranges from 5 to 6 years. The Company is also required to pay royalties on net sales of certain products and services under the license and supply agreements at rates that range from mid single-digit to low double-digit percentage. The Company is also party to a non-exclusive sublicense agreement that provides the Company with a non-exclusive sublicense to certain patent rights. During the term of the agreement, the Company is required to pay royalties at a low single-digit percentage rate on net revenue of products and services that are covered by the licensed patent rights. For the years ended December 31, 2019 and 2020, the Company incurred an immaterial amount in royalty expense pursuant to these agreements.

Note 14 - Legal proceedings

The Company may be a party to a litigation or subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, the Company currently believes that the final outcome of these ordinary course matters will not have a material adverse effect on its business. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors. The Company is not currently a party to any material legal proceedings, and the Company’s management believes that there are currently no claims or actions pending against the Company, the ultimate disposition of which could have a material adverse effect on the Company’s results of operations or financial condition.

Note 15 - Net loss per share attributable to common stockholders

The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have an anti-dilutive effect:

	Years Ended December 31,	
	2019	2020
Options outstanding to purchase common stock	308,947	384,613
Convertible preferred stock (as converted to common stock)	2,133,569	3,211,652

Note 16 - Related party transactions

As summarized in Note 13, the Company has a License Agreement with Yale University, which is a holder of Series A and Series B-2 preferred stock. The Company has a License Agreement with Caltech, which is a holder of Series B preferred stock. There are no receivables or payables due from or to these entities as of December 31, 2019 and 2020.

Note 17 - Subsequent events

The Company has evaluated for subsequent events through May 13, 2021, the date these financial statements were issued.

On January 5, 2021, the Company sold an additional 130,006 shares of Series D Preferred Stock for net consideration of approximately \$10.0 million.

On May 12, 2021, the Company entered into a Patent Purchase Agreement (the "Patent Purchase Agreement") with certain third parties (the "Sellers") to purchase a collection of patents for an aggregate purchase price of \$20.0 million. The Company expects to fund the purchase with cash on hand. In connection with entering into the Patent Purchase Agreement, the Company also entered into an Assumption Agreement with the Sellers to assume the Sellers' rights and obligations under a covenant not to sue with a separate third party related to certain patents purchased pursuant to the Patent Purchase Agreement. In addition, in connection with entering into the Patent Purchase Agreement, the Company has agreed to enter into a Supply Agreement with certain of the Sellers pursuant to which certain of the Sellers will agree to supply certain reagents to the Company.

ISOPLEXIS CORPORATION AND SUBSIDIARY
CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

in thousands, except share amounts)	December 31, 2020	March 31, 2021
Assets		
Current assets:		
Cash	\$ 106,641	\$ 101,400
Accounts receivable, net	2,922	3,725
Inventories, net	3,955	6,555
Prepaid expenses and other current assets	2,156	3,292
Total current assets	115,674	114,972
Property and equipment, net	3,227	3,738
Intangible assets, net	1,643	1,649
Other assets	3,061	2,787
Total assets	\$ 123,605	\$ 123,146
Liabilities, redeemable convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 2,137	\$ 4,127
Accrued expenses and other current liabilities	2,129	2,878
Deferred revenue	356	643
Deferred rent	—	12
Total current liabilities	4,622	7,660
Warrant liability	4,637	6,444
Long-term debt	22,137	22,292
Total liabilities:	31,396	36,396
Commitments and contingencies (Notes 10 and 12)		
Redeemable convertible preferred stock:		
Series A preferred stock, \$0.001 par value per share, 253,862 shares authorized, issued and outstanding (liquidation value of \$2,734 as of March 31, 2021)	1,596	1,596
Series A-2 preferred stock, \$0.001 par value per share, 293,180 shares authorized; 290,002 issued and outstanding (liquidation value of \$5,690 as of March 31, 2021)	3,623	3,623
Series B preferred stock, \$0.001 par value per share, 376,061 shares authorized, issued and outstanding (liquidation value of \$9,490 as of March 31, 2021)	6,606	6,606
Series B-2 preferred stock, \$0.001 par value per share, 237,183 shares authorized, issued and outstanding (liquidation value of \$9,334 as of March 31, 2021)	6,991	6,991
Series C preferred stock, \$0.001 par value per share, 564,287 shares authorized, issued and outstanding (liquidation value of \$29,995 as of March 31, 2021)	24,839	24,839
Series C-2 preferred stock, \$0.001 par value per share, 515,218 shares authorized, issued and outstanding (liquidation value of \$27,521 as of March 31, 2021)	24,929	24,929
Series D preferred stock, \$0.001 par value per share, 1,202,549 shares authorized; 975,039 and 1,105,045 shares issued and outstanding as of December 31, 2020 and March 31, 2021, respectively (liquidation value of \$86,682 as of March 31, 2021)	74,876	84,876
Stockholders' deficit:		
Common stock, \$0.001 par value, 4,647,474 shares authorized; 266,738 and 268,102 shares issued and outstanding as of December 31, 2020 and March 31, 2021, respectively	—	—
Additional paid-in capital	1,153	1,253
Accumulated deficit	(52,404)	(67,963)
Total stockholders' deficit	(51,251)	(66,710)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$ 123,605	\$ 123,146

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

ISOPLEXIS CORPORATION AND SUBSIDIARY
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

(in thousands, except share and per share amounts)	Three months ended March 31,	
	2020	2021
Revenue		
Product revenue	\$ 1,338	\$ 2,927
Service revenue	276	307
Total revenue	1,614	3,234
Cost of product revenue	761	1,549
Cost of service revenue	33	25
Gross profit	820	1,660
Operating expenses:		
Research and development expenses	3,138	3,674
General and administrative expenses	1,790	4,378
Sales and marketing	2,275	7,074
Total operating expenses	7,203	15,126
Loss from operations	(6,383)	(13,466)
Other income and (expense):		
Grant income	550	596
Change in fair value of warrants and loan commitment	(21)	(1,946)
Interest income	—	6
Interest expense	—	(749)
Net loss	\$ (5,854)	\$ (15,559)
Accrued dividends on preferred stock	(1,468)	(3,276)
Net loss attributable to common stockholders	(7,322)	(18,835)
Basic and diluted net loss per common share	\$ (28.11)	\$ (70.49)
Weighted-average common shares outstanding—basic and diluted	260,446	267,203

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

ISOPLEXIS CORPORATION AND SUBSIDIARY

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT (UNAUDITED)

(in thousands, except share amounts)	Series A Preferred		Series A-2 Preferred		Series B Preferred		Series B-2 Preferred		Series C Preferred		Series C-2 Preferred		Series D Preferred		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
	Balance at January 1, 2020	253,862	\$1,596	290,002	3,623	376,061	\$6,606	237,183	\$6,991	564,287	\$24,839	412,174	\$19,929	—	—	260,446			
Issuance of Preferred Stock	—	—	—	—	—	—	—	—	—	—	103,044	5,000	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49	—	49
Net Loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(5,854)	(5,854)
Balance at March 31, 2020	253,862	\$1,596	290,002	3,623	376,061	\$6,606	237,183	\$6,991	564,287	\$24,839	515,218	\$24,929	—	—	260,446	—	\$ 655	\$ (34,994)	\$ (34,339)

(in thousands, except share amounts)	Series A Preferred		Series A-2 Preferred		Series B Preferred		Series B-2 Preferred		Series C Preferred		Series C-2 Preferred		Series D Preferred		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
	Balance at January 1, 2021	253,862	\$1,596	290,002	\$3,623	376,061	\$6,606	237,183	\$6,991	564,287	\$24,839	515,218	\$24,929	975,039	\$74,876	266,738			
Issuance of Preferred Stock	—	—	—	—	—	—	—	—	—	—	—	—	130,006	10,000	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,364	—	5	—	5
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95	—	95
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(15,559)	(15,559)
Balance at March 31, 2021	253,862	\$1,596	290,002	\$3,623	376,061	\$6,606	237,183	\$6,991	564,287	\$24,839	515,218	\$24,929	1,105,045	\$84,876	268,102	—	\$ 1,253	\$ (67,963)	\$ (66,710)

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

ISOPLEXIS CORPORATION AND SUBSIDIARY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

(in thousands)	Three months ended March 31,	
	2020	2021
Cash flows from operating activities		
Net loss	\$ (5,854)	\$ (15,559)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	178	308
Provision for warranty costs	8	84
Change in fair value of warrants and loan commitment	21	1,946
Amortization of debt discount	—	155
Stock-based compensation	49	95
Changes in operating assets and liabilities:		
Accounts receivable	1,346	(803)
Grants receivable	(127)	—
Inventories	(701)	(2,600)
Prepaid expenses and other current assets	(176)	(1,136)
Other assets	24	135
Accounts payable	(434)	1,990
Accrued liabilities	(100)	665
Deferred revenue	(78)	287
Deferred rent	(7)	12
Net cash used in operating activities	(5,851)	(14,421)
Cash flows from investing activities		
Purchases of property and equipment	(427)	(739)
Payments for patents capitalized	(112)	(86)
Purchases of license	(500)	—
Net cash used in investing activities	(1,039)	(825)
Cash flows from financing activities		
Proceeds from issuance of Preferred Stock - Series C-2	5,000	—
Proceeds from issuance of Preferred Stock - Series D	—	10,000
Exercise of common stock options	—	5
Net cash provided by financing activities	5,000	10,005
Net change in cash	(1,890)	(5,241)
Cash beginning	27,371	106,641
Cash ending	\$ 25,481	\$ 101,400
Supplemental disclosure of cash flow information		
Cash paid for interest	—	719

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

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Nature of operations

IsoPlexis Corporation and its subsidiary (the “Company”) was incorporated in the State of Delaware in March 2013. The Company is a privately held life sciences company building solutions to accelerate the development of curative medicines and personalized therapeutics. The Company’s award-winning single-cell proteomics systems reveal unique biological activity in small subsets of cells, allowing researchers to connect more directly to in-vivo biology and develop more precise and personalized therapies. The Company’s products have been adopted by researchers around the world, including each of the top 15 global pharmaceutical companies by revenue and by approximately 45% of comprehensive cancer centers in the United States. On December 28, 2018, the Company created IsoPlexis UK Limited (IsoPlexis UK), which has remained dormant.

COVID - 19

The COVID-19 pandemic developed rapidly in 2020, with a significant number of cases. Measures taken by various governments to contain the virus have affected economic activity. The Company has taken a number of measures to monitor and mitigate the effects of COVID-19, such as safety and health measures for the Company’s employees (such as social distancing and working from home) and securing the supply of materials that are essential to the production process.

At this stage, the impact on the Company’s business and results has not been significant and based on the Company’s experience to date management expects this to remain the case. The Company will continue to follow the various government policies and advice.

Basis of presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted (“GAAP”) in the United States. The condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, IsoPlexis UK. All intercompany transactions have been eliminated.

Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASU”) promulgated by the Financial Accounting Standards Board (“FASB”).

The condensed consolidated financial statements of the Company included herein have been prepared, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted from these condensed consolidated financial statements, as is permitted by such rules and regulations. Accordingly, these condensed consolidated financial statements should be read in conjunction with the consolidated financial statements as of and for the years ended December 31, 2019 and 2020, and the notes thereto, which are included elsewhere in this prospectus. The results for interim periods are not necessarily indicative of results to be expected for the full year or any other interim period.

In the opinion of management, the information furnished reflects all adjustments, all of which are of a normal and recurring nature, necessary for a fair presentation of the results for the reported interim periods. The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The results of operations for interim periods are not necessarily indicative of results to be expected for the full year or any other interim period.

Liquidity and ability to continue as a going concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. Management has evaluated whether there are conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date the financial statements are issued. Since its inception, the Company has incurred net losses and negative cash flows from operations.

During the three months ended March 31, 2020 and 2021, the Company incurred a net loss of \$5.9 million and \$15.6 million, respectively, and used \$5.9 million and \$14.4 million in cash for operations, respectively. In addition, as of March 31, 2021, the Company had an accumulated deficit of \$68.0 million. The Company expects to continue to generate operating losses and negative cash flows for the foreseeable future.

The Company currently expects that the cash on hand of \$101.4 million as of March 31, 2021, will be sufficient to fund its operating expenses and capital requirements for more than 12 months from the date the financial statements are available to be issued. Additional funding will be needed to finance future research and development, manufacturing, and commercial activities. To date, the Company has principally financed its operations through private placements of preferred stock. The Company will seek additional funding either through an initial public offering or through private equity and debt financings and other arrangements. There is no assurance the Company will be successful in obtaining such additional financing on terms acceptable to it, if at all, and it may not be able to enter into other arrangements. If the Company is unable to obtain funding, it could be forced to delay, reduce or eliminate the Company's research and development programs, expansion or commercialization efforts, which could adversely affect its business prospects and ability to continue operations.

The Company is subject to risks common to companies in the life sciences industry. There can be no assurance that the Company's research and development will be successful, that adequate protection for its intellectual property will be maintained, that any products developed will obtain required regulatory approval, or that any approved products will be commercially viable.

Note 2 - Summary of significant accounting policies

Significant Accounting Policies

The Company's significant accounting policies are described in Note 2, "Summary of significant accounting policies" in our consolidated financial statements as of and for the years ended December 31, 2019 and 2020.

New accounting standards not yet effective

In February 2016 the FASB issued ASU No. 2016-02, Leases (Topic 842). This standard established a right-of-use model that requires all lessees to recognize right-of-use assets and liabilities on their balance sheet that arise from leases as well as provide disclosures with respect to certain qualitative and quantitative information related to their leasing arrangements. The Company plans to adopt the standard on January 1, 2022, using a modified retrospective transition approach to be applied to leases existing as of, or entered into after, January 1, 2022. The Company has not yet determined the impact the adoption of this standard will have on the consolidated financial statements.

In June 2016 the FASB issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This standard requires that credit losses be reported using an expected losses model rather than the incurred losses model that is currently used, and establishes additional disclosures related to credit risks. For available-for-sale debt securities with unrealized losses, this standard now requires allowances to be recorded instead of reducing the amortized cost of the investment. This standard will be effective for the Company on January 1, 2023. The Company has not yet determined the impact the adoption of this standard will have on the consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Reference Rate Reform (Topic 848) ("ASU 2020-04"), which provides companies with temporary optional financial reporting alternatives to ease the potential burden in accounting for reference rate reform and includes a provision that allows companies to account for a modified contract as a continuation of an existing contract. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. The Company has certain debt instruments for which the interest rates are indexed to LIBOR, and as a result, is currently evaluating the effect that the implementation of this standard will have on the Company's consolidated operating results, cash flows, financial condition and related disclosures.

Note 3 - Fair Value Measurement

Certain of the Company's assets and liabilities are recorded at fair value, as described below.

The following tables set forth the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy:

(in thousands)	December 31, 2020			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$ —	\$ —	\$ 4,637	\$ 4,637
Loan commitment	\$ —	\$ —	\$ 2,240	\$ 2,240

(in thousands)	March 31, 2021			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$ —	\$ —	\$ 6,444	\$ 6,444
Loan commitment	\$ —	\$ —	\$ 2,101	\$ 2,101

Under ASC Topic 480, Distinguishing Liabilities from Equity, the warrants (see Note 7) are freestanding financial instruments that qualify as liabilities required to be recorded at their estimated fair value at the inception date and remeasured at each reported balance sheet date thereafter until settlement. The fair value of the warrant liability was estimated using a Black-Scholes Option Pricing Model, with the following significant unobservable inputs (Level 3):

	December 31, 2020		March 31, 2021	
	Series A-2	Series D	Series A-2	Series D
Stock price	\$ 76.92	\$ 76.92	\$ 76.92	\$ 98.17
Exercise price	\$ 12.59	\$ 76.92	\$ 12.59	\$ 76.92
Expected term (in years)	4.7	10	4.5	9.75
Volatility	50 %	50 %	55 %	50 %
Dividend rate	—	—	—	—
Risk-free interest rate	0.36 %	0.93 %	0.78 %	1.74 %

The Company's volatility was estimated at each valuation date based on the price history for guideline companies looking back over the number of years equal to the expected term. During the periods presented, the Company has not changed the manner in which it values assets and liabilities that are measured at fair value. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers within the hierarchy during the three months ended March 31, 2021 and 2020.

The commitment for a second tranche under the Credit Agreement (see Note 7) qualifies as a freestanding financial instrument required to be recorded at estimated fair value. The fair value of the loan commitment was estimated based on the present value of future expected cash flows discounted at the Company's effective interest rate of 13.98% and 14.19% at December 31, 2020 and March 31, 2021, respectively.

The following table presents changes during the three months ended March 31, 2020 and 2021 in Level 3 liabilities measured at fair value on a recurring basis:

(in thousands)	Loan Commitment	Series D Warrants	Series A Warrants
Balance as January 1, 2020	\$ —	\$ —	122
Issuance	—	—	—
Change in estimated fair value	—	—	21
Balance at March 31, 2020	\$ —	\$ —	143

(in thousands)	Loan Commitment	Series D Warrants	Series A Warrants
Balance at January 1, 2021	\$ 2,240	\$ 4,430	\$ 207
Issuance	—	—	—
Change in estimated fair value	(139)	1,807	—
Balance at March 31, 2021	<u>\$ 2,101</u>	<u>\$ 6,237</u>	<u>\$ 207</u>

The above fair value measurements are sensitive to changes in underlying unobservable inputs. A change in those inputs could result in a significantly higher or lower fair value measurement.

Changes in fair value of the warrants is included in other expense in the statements of operations.

Note 4 - Revenue

The Company's revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and consumables used in single cell research equipment. Service and other revenue primarily consists of revenue generated from measuring immune responses using the Company's technology.

Revenue by source

(in thousands)	Three Months Ended March 31,	
	2020	2021
Instruments	\$ 997	\$ 2,119
Consumables	341	809
Extended service warranty	46	151
Other service revenue	230	155
Total revenue	<u>\$ 1,614</u>	<u>\$ 3,234</u>

Revenue by geographic area

Based on region of destination (in thousands)	Three Months Ended March 31,	
	2020	2021
Americas ⁽¹⁾	\$ 1,218	\$ 2,236
Europe ⁽²⁾	268	565
Greater China ⁽³⁾	110	225
Asia-Pacific ⁽⁴⁾	18	208
Total revenue	<u>\$ 1,614</u>	<u>\$ 3,234</u>

(1) Region includes revenue from the United States of America

(2) Region includes revenue from the United Kingdom, Belgium, Portugal, Germany, Sweden, Italy, Israel and Switzerland

(3) Region includes revenue from China and Taiwan

(4) Region includes revenue from Singapore, Japan, Australia, New Zealand and Korea

Performance obligations

The Company regularly enters into contracts with multiple performance obligations. Most performance obligations are generally satisfied within a short time after the contract execution date. As of March 31, 2021, the aggregate amount of the transaction price allocated to remaining performance obligations was \$0.6 million, of which substantially all is expected to be recognized as revenue during 2021.

Contract balances

Contract balances represent amounts presented in the consolidated balance sheets when either the Company has transferred goods or services to the customer, or the customer has paid consideration to the Company under the contract. These contract balances included accounts receivable (see Note 5) and deferred revenue. Accounts receivable balances represent amounts billed to customers for goods and services when the Company has an unconditional right to payment of the amount billed. Deferred revenue, as of December 31, 2020 and March 31, 2021 was \$0.4 million and \$0.6 million, respectively. Deferred revenue represents cash consideration received from customers for which all services or products have not yet been transferred. Revenue recorded during the three months ended March 31, 2020 included \$0.2 million of previously deferred revenue that was included in contract liabilities as of December 31, 2019. Revenue recorded during the three months ended March 31, 2021 included \$0.4 million of previously deferred revenue that was included in contract liabilities as of December 31, 2020.

Note 5 - Supplemental Balance Sheet Details

Accounts receivable, net consists of the following:

<u>(in thousands)</u>	<u>December 31,</u> <u>2020</u>	<u>March 31,</u> <u>2021</u>
Accounts receivable	\$ 2,972	\$ 3,775
Allowance for doubtful accounts	(50)	(50)
Total accounts receivable net of allowance	<u>\$ 2,922</u>	<u>\$ 3,725</u>

Inventories, net consists of the following:

<u>(in thousands)</u>	<u>December 31,</u> <u>2020</u>	<u>March 31,</u> <u>2021</u>
Raw materials	\$ 3,631	\$ 6,412
Work in process	28	20
Finished good	356	172
Reserve for excess and obsolete inventory	(60)	(49)
Total Inventories, net	<u>\$ 3,955</u>	<u>\$ 6,555</u>

Property and equipment, net consists of the following:

<u>(in thousands)</u>	<u>December 31,</u> <u>2020</u>	<u>March 31,</u> <u>2021</u>
Furniture and equipment	\$ 2,848	\$ 3,226
Computers and technology	1,453	1,753
Leasehold improvements	698	759
Total	4,999	5,738
Accumulated depreciation	(1,772)	(2,000)
Property & equipment, net	<u>\$ 3,227</u>	<u>\$ 3,738</u>

Depreciation expense was \$0.2 million for each of the three month periods ended March 31, 2020 and 2021.

Accrued expenses and other current liabilities consist of the following:

(in thousands)	December 31,	March 31,
	2020	2021
Accrued compensation	\$ 867	\$ 864
Accrued operating expenses	1,081	1,769
Other, including warranties	181	245
Total accrued liabilities	\$ 2,129	\$ 2,878

Note 6 - Intangible assets, net

Intangible assets consist of the following:

(in thousands)	Remaining Useful Life	December 31, 2020		
		Gross	Accumulated Amortization	Net
Patents	8 - 14	\$ 1,182	\$ 52	\$ 1,130
Capitalized Licenses	2 - 5	670	157	513
Total intangible assets		\$ 1,852	\$ 209	\$ 1,643

(in thousands)	Remaining Useful Life	March 31, 2021		
		Gross	Accumulated Amortization	Net
Patents	8 - 14	\$ 1,268	\$ 100	\$ 1,168
Capitalized Licenses	2 - 5	670	189	481
Total intangible assets		\$ 1,938	\$ 289	\$ 1,649

Amortization expense was \$0.1 million for each of the three month periods ended March 31, 2020 and 2021. The amortization of intangible assets is recognized in cost of product and service revenue.

As of March 31, 2021, the estimated annual amortization of intangible assets for the remainder of 2021 and future years thereafter is shown in the following table. Actual amortization expense to be reported in future periods could differ from these estimates as a result of acquisitions, divestitures, and asset impairments, among other factors.

Year (in thousands)	Estimated Annual Amortization
2021	\$ 178
2022	219
2023	219
2024	219
2025	135

Note 7- Debt

On September 15, 2015, the Company received a \$0.4 million loan from Connecticut Innovations, Inc. (“CII”). The loan matured on March 15, 2019 and was repaid in full. In connection with the issuance of the loan, the Company also issued to CII warrants to purchase 3,178 shares of Series A-2 preferred stock. The warrants have a contractual life that expires on September 15, 2022. The exercise price is \$12.58608 per warrant share.

On December 30, 2020, the Company closed on a \$50.0 million Credit Agreement, of which the Company borrowed \$25.0 million immediately upon closing. As of March 31, 2021, an additional \$25.0 million remained available through March 31, 2022 subject to a revenue milestone, defined as total revenue of at least \$20.0 million over the twelve-month period most recently ended.

The Credit Agreement bears interest at the one-month LIBOR, with a 1.75% floor, plus a 9.50% margin (11.25% at March 31, 2021). Monthly payments of interest-only are due over the term of the loan with no scheduled loan amortization. Amounts borrowed are due and payable on the maturity date, December 30, 2025. The loan is secured by substantially all of the Company's assets. Financial covenants include a \$3.0 million minimum cash balance at all times and minimum revenue amounts, which range from \$15.0 million for the twelve-month period ended June 30, 2021 to \$46.8 million for the twelve-month period ended June 30, 2023 and are measured on a quarterly basis.

In connection with the Credit Agreement closing, the Company issued to the lender warrants to purchase 97,504 shares of Series D preferred stock. The warrants have a 10-year contractual life and an exercise price of \$76.92 per warrant share. The fair value at issuance was initially estimated at \$4.4 million and was recorded as a warrant liability. The lender and affiliates of the lender also purchased Series D preferred stock at the closing of the Credit Agreement. In addition, given that the Credit Agreement contains a second tranche of potential borrowings, the Company identified and recorded within other assets on the balance sheet a \$2.2 million asset related to the future loan commitment. The Company determined that the loan commitment meets the definition within ASC 480 as a freestanding financial instrument to be recorded at fair value given that it is both (1) legally detachable per the explicit ability provided to the creditor allowing it to assign all or part of its interest under the Credit Agreement to any person or entity; and (2) separately exercisable given that it can be exercised or not exercised at the Company's option without impacting the outstanding balance of the original \$25 million borrowed upon execution of the Credit Agreement. The remaining proceeds were allocated to the value of the initial debt borrowed and the discount resulting on such debt will be amortized over the term of the Credit Agreement.

Note 8 - Equity

Common stock

As of December 31, 2020 and March 31, 2021, the Company had authorized 4,647,474 shares of common stock, \$0.001 par value per share ("Common Stock"), of which a total of 266,738 and 268,102 shares were outstanding, respectively.

Preferred stock

All Series of preferred stock are collectively referred to as the "Preferred Stock". As of March 31, 2021, the cumulative, accrued dividends totaled \$17.5 million. As of March 31, 2021, shares of Preferred Stock would be convertible to 3,341,659 shares of Common Stock.

Voting rights

Each holder of Preferred Stock is entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held are convertible. The holders of Preferred Stock vote together with the holders of Common Stock as a single class.

Note 9 - Equity based compensation

The Company's 2014 Stock Plan (the "Plan") provides for the granting of stock options or restricted stock to key employees, officers, directors and consultants. The Board of Directors, at its sole discretion, shall determine the exercise price. Stock options expire 10 years from the date of grant. The stock options generally vest 25% upon the one-year anniversary of the service inception date and then ratably each month over the remaining 36 months. Upon termination of service, any unvested stock options are automatically returned to the Company. Vested stock options that are not exercised within the specified period, according to the terms and conditions of the option plan, following the termination as an employee, consultant, or service provider to the Company are surrendered back to the Company. Those stock options are added back to the pool and made available for future grants. The maximum number of shares of common stock reserved under the Plan is 960,420. Compensation cost is recorded on a straight-line basis over the requisite service period of the award based on the fair value of the options issued on the measurement date.

The following table summarizes stock option activity for the three months ended March 31, 2021:

	Stock Options			
	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (In thousands)
Outstanding as of December 31, 2020	384,613	\$ 5.78	7.2	
Granted	48,725	14.64		
Forfeited	(458)	7.70		
Exercised	(1,364)	3.88		
Outstanding as of March 31, 2021	431,516	\$ 6.78	7.3	\$ 14,080
Vested and expected to vest as of March 31, 2021	431,516	\$ 6.78	7.3	\$ 14,080
Exercisable at March 31, 2021	289,724	\$ 5.29	6.6	\$ 9,887

The following table summarizes stock-based compensation expense, and also the allocation within the consolidated statements of operations:

(in thousands)	Three Months Ended March 31,	
	2020	2021
Research and development	\$ 8	\$ 19
General and administrative	37	47
Sales and marketing	4	29
Total stock-based compensation expense	\$ 49	\$ 95

The weighted-average grant-date fair value of stock options awarded during the three months ended March 31, 2020 and 2021 was approximately \$4.07 per share and \$22.19 per share, respectively. The aggregate grant date fair value of stock options vested during each of the three month periods ended March 31, 2020 and 2021 was \$0.1 million. As of March 31, 2021, there was a total of \$1.4 million of unrecognized employee compensation costs related to non-vested stock option awards expected to be recognized over a weighted average period of 3.6 years.

The Company estimates the fair value of stock-based compensation utilizing the Black-Scholes option pricing model, which is dependent upon several variables, such as expected term, volatility, risk-free interest rate, and expected dividends. Each of these inputs is subjective and generally requires significant judgment to determine.

The following table summarizes the range of key assumptions used to determine the fair value of stock options granted during:

	Three Months Ended March 31,	
	2020	2021
Risk-free interest rate	0.22 %	0.94% – 1.4%
Expected term (in years)	7	7
Expected volatility	50 %	50 %
Expected dividend yield	—	—
Exercise prices	\$ 8.22	\$ 14.64
Estimated fair value of common stock	\$ 8.22	\$31.68 - \$39.41

The risk-free interest rate assumption was based upon observed interest rates appropriate for the expected term of the stock options. The expected volatility was calculated based on comparable public companies. The expected term is based on the average of the vesting period and the legal term. The Company has not declared any dividends

in its history and does not expect to issue dividends over the life of the stock options and therefore has estimated the dividend yield to be zero.

Note 10 - Operating leases

The Company has multiple operating lease commitments for office space and equipment, which expire through 2026. As of March 31, 2021, the Company had the following future minimum lease payments under non-cancelable leases for the remainder of 2021 and the future years thereafter:

(in thousands)	Years ending December 31	
2021	\$	876
2022		1,022
2023		941
2024		871
2025		716
Thereafter		292
Total	\$	4,718

The rent expense for the three months ended March 31, 2020 and 2021 was approximately \$0.2 million.

Note 11 - Product warranties

The Company warrants certain products generally for periods of one year following the delivery date. Accrued warranty costs are included in accrued expenses and other current liabilities.

(in thousands)	Three Months Ended March 31,	
	2020	2021
Accrued warranty cost, beginning	\$ 85	\$ 135
Cost of warranty services	(35)	(43)
Estimated provision for warranty cost	8	84
Accrued warranty cost, end	\$ 58	\$ 176

Note 12 - Legal proceedings

The Company may be a party to a litigation or subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, the Company currently believes that the final outcome of these ordinary course matters will not have a material adverse effect on its business. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors. The Company is not currently a party to any material legal proceedings, and the Company's management believes that there are currently no claims or actions pending against the Company, the ultimate disposition of which could have a material adverse effect on the Company's results of operations or financial condition.

Note 13 - Net loss per share attributable to common stockholders

The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have an anti-dilutive effect:

	<u>March 31,</u> <u>2020</u>	<u>March 31,</u> <u>2021</u>
Options outstanding to purchase common stock	316,347	431,516
Convertible preferred stock (as converted to common stock)	2,236,613	3,341,659

Note 14 - Related party transactions

The Company has a License Agreement with Yale University, which is a holder of Series A and Series B-2 preferred stock. The Company has a License Agreement with Caltech, which is a holder of Series B preferred stock. There are no receivables or payables due from or to these entities as of March 31, 2021.

Note 15 - Subsequent events

The Company has evaluated for subsequent events through July 2, 2021, the date these financial statements were issued.

On May 12, 2021, the Company entered into the Patent Purchase Agreement with the Sellers to purchase a collection of patents for an aggregate purchase price of \$20.0 million. The Company funded the purchase with cash on hand. In connection with entering into the Patent Purchase Agreement, the Company also entered into an Assumption Agreement with the Sellers to assume the Sellers' rights and obligations under a covenant not to sue with a separate third party related to certain patents purchased pursuant to the Patent Purchase Agreement. In addition, in connection with entering into the Patent Purchase Agreement, the Company entered into a Supply Agreement with one of the Sellers pursuant to which they have agreed to supply certain reagents to us.

On May 27, 2021, the Company entered into an amendment to the credit agreement and guaranty, dated as of December 30, 2020 between the Company and Perceptive Credit Holdings III, LP, as administrative agent and as a lender, to, among other things, split the previously remaining \$25.0 million delayed draw term loan commitments under the Credit Agreement into a \$10.0 million Tranche B term loan, available to be drawn upon the effectiveness of the First Amendment, and a \$15.0 million Tranche C term loan, available to be drawn subject to achievement of a revenue milestone set forth in the Credit Agreement. The full amount of the Tranche B term loan was drawn on May 27, 2021.



PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance.

The following table sets forth the various expenses, other than the underwriting discount, payable in connection with the offering contemplated by this registration statement. All of the fees set forth below are estimates except for the SEC registration fee, the FINRA fee and the stock exchange listing fee.

	<u>Payable by the registrant</u>
SEC registration fee	*
FINRA filing fee	*
Nasdaq listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous fees and expenses	*
Total	* <hr/> <hr/>

* To be furnished by amendment.

Item 14. Indemnification of Directors and Officers.

Limitation of personal liability of directors and indemnification

We have entered into indemnification agreements with each of our current directors and executive officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We also intend to enter into indemnification agreements with our future directors and executive officers.

Section 145 of the Delaware General Corporation Law (the "DGCL") provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the registrant. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Our amended and restated bylaws provide for indemnification by the registrant of its directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions or (4) for any transaction from which the director derived an improper personal benefit. Our amended and restated certificate of incorporation provides for such limitation of liability.

We maintain standard policies of insurance under which coverage is provided (a) to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act and (b) to us with respect to

payments we may make to our officers and directors pursuant to the above indemnification provision or otherwise as a matter of law.

Item 15. Recent Sales of Unregistered Securities.

Since January 1, 2018, we have engaged in the following transactions that were not registered under the Securities Act:

- In November 2018, we issued and sold 564,287 shares of Series C redeemable convertible preferred stock to nine accredited investors at a price of \$44.3037 per share, for aggregate proceeds of \$25,000,001.95;
- In December 2019, we issued and sold 515,218 shares of Series C-2 redeemable convertible preferred stock to six accredited investors at a price of \$48.5231 per share, for aggregate proceeds of \$24,999,974.54;
- In December 2020, we issued and sold 975,039 shares of Series D redeemable convertible preferred stock to ten accredited investors at a price of \$76.92 per share, for aggregate proceeds of \$74,999,999.88;
- In January 2021, we issued and sold 130,006 shares of Series D redeemable convertible preferred stock to one accredited investor at a price of \$76.92 per share, for aggregate proceeds of \$10,000,061.52;
- From January 1, 2018 to July 20, 2021, we granted options to purchase an aggregate of 504,287 shares of our common stock under our 2014 Plan to our directors, officers, employees, consultants and other service providers at exercise prices ranging from \$5.81 to \$38.48;
- From January 1, 2018 to July 20, 2021, we issued 21,242 shares of our common stock upon the exercise of options under our 2014 Plan to our directors, officers, employees, consultants and other service providers at exercise prices ranging from \$1.02 to \$8.22 per share, for a weighted-average exercise price of \$3.77 per share;
- In December 2020, we issued a warrant to purchase an aggregate of 97,504 shares of Series D redeemable convertible preferred stock, exercisable for a period of ten years at an exercise price of \$76.92 per share, to Perceptive Credit Holdings III, LP in connection with our entry into a Credit Agreement and Guaranty with the guarantors and lenders thereto and Perceptive Credit Holdings III, L.P. as administrative agent, on December 30, 2020; and
- In May 2021, we issued 3,178 shares of Series A-2 redeemable convertible preferred stock in connection with the exercise of the warrant held by Connecticut Innovations, Incorporated at an exercise price of \$12.58608 per share, for aggregate proceeds of \$39,998.56.

None of the foregoing transactions involved any underwriters, underwriters discounts or commissions, or any public offering. Unless otherwise stated, the sales of the above securities were deemed to be exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act (or Regulation D or Regulation S promulgated thereunder) or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to, or for sale in connection with, any distribution thereof and appropriate legends were placed upon the stock certificates issued in these transactions.

Item 16. Exhibits and Financial Statement Schedules.

- (a) Exhibits: The list of exhibits set forth under “Exhibit Index” at the end of this registration statement is incorporated herein by reference.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
1.1	Form of Underwriting Agreement**
3.1	Form of Amended and Restated Certificate of Incorporation of IsoPlexis Corporation to be in effect upon completion of this offering**
3.2	Form of Amended and Restated Bylaws of IsoPlexis Corporation to be in effect upon completion of this offering**
4.1	Form of Common Stock Certificate of IsoPlexis Corporation**
4.2	Amended and Restated Investors' Rights Agreement, dated as of December 30, 2020, by and among IsoPlexis Corporation and the other parties thereto**
4.3	Warrant Certificate, dated as of December 30, 2020, by and between IsoPlexis Corporation and Perceptive Credit Holdings III, LP*
5.1	Form of Opinion of Cravath, Swaine & Moore LLP*
10.1	Credit Agreement and Guaranty, dated as of December 30, 2020, by and among IsoPlexis Corporation, Perceptive Credit Holdings III, L.P., as administrative agent, and the other parties thereto*
10.2	First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, by and among IsoPlexis Corporation, Perceptive Credit Holdings III, L.P. as administrative agent, and the other parties thereto*
10.3§	Amended and Restated License Agreement, dated as of November 28, 2015, by and between IsoPlexis Corporation and Yale University§*
10.4§	Amendment to the License Agreement, dated as of December 19, 2016, by and between IsoPlexis Corporation and Yale University§*
10.5§	Second Amendment to the License Agreement, dated as of January 8, 2018, by and between IsoPlexis Corporation and Yale University§*
10.6§	License Agreement, dated as of March 8, 2017, by and between IsoPlexis Corporation and the California Institute of Technology§*
10.7§	Patent Purchase Agreement, dated as of May 12, 2021, by and among QIAGEN Sciences, LLC, QIAGEN GmbH and IsoPlexis Corporation§*
10.8	Offer Letter, dated November 18, 2019, by and between IsoPlexis Corporation and John Strahley*
10.9	Offer Letter, dated May 5, 2020, by and between IsoPlexis Corporation and Peter Seisel*
21.1	Subsidiaries of IsoPlexis Corporation*
23.1	Consent of Deloitte & Touche LLP*
23.2	Consent of Cravath, Swaine & Moore LLP (contained in its opinion filed as Exhibit 5.1 hereto)
24.1	Power of attorney (included on the signature page to this registration statement)

* Filed herewith.

** To be filed by amendment.

† Indicates management contract or compensatory plan.

§ Portions of the exhibit, marked by brackets, have been omitted because the omitted information (i) is not material and (ii) would likely cause competitive harm if publicly disclosed.

WARRANT CERTIFICATE

THIS WARRANT CERTIFICATE AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “**SECURITIES ACT**”), OR QUALIFIED UNDER ANY STATE OR FOREIGN SECURITIES LAWS AND MAY NOT BE OFFERED FOR SALE, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED OR ASSIGNED UNLESS (I) A REGISTRATION STATEMENT COVERING SUCH SHARES IS EFFECTIVE UNDER THE SECURITIES ACT AND IS QUALIFIED UNDER APPLICABLE STATE AND FOREIGN LAW OR (II) THE TRANSACTION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS UNDER THE SECURITIES ACT AND THE QUALIFICATION REQUIREMENTS UNDER APPLICABLE STATE AND FOREIGN LAW.

Warrant Shares Issuable: 97,504 Shares of Series D Preferred Stock
Warrant Certificate No.: D-1
Issue Date: December 30, 2020 (the “**Issue Date**”)

FOR VALUE RECEIVED, IsoPlexis Corporation, a Delaware corporation (the “**Company**”), hereby certifies that Perceptive Credit Holdings III, LP or any of its registered assigns (collectively, the “**Holder**”) is entitled to purchase from the Company up to 97,504 duly authorized, validly issued, fully paid and nonassessable shares of the Company’s Series D Preferred Stock at the applicable per share Exercise Price (defined below), all subject to the terms, conditions and adjustments set forth below in this Warrant Certificate. Certain capitalized terms used herein are defined in **Section 1**.

This Warrant Certificate has been issued pursuant to the terms of the Credit Agreement and Guaranty, dated as of December 30, 2020 (as amended or otherwise modified from time to time, the “**Credit Agreement**”), among the Company, as the borrower, the guarantors from time to time party thereto, the lenders from time to time party thereto and Perceptive Credit Holdings III, LP, as administrative agent.

Section 1. Definitions. The following terms when used herein have the following meanings:

“**Aggregate Exercise Price**” means, with respect to any exercise of this Warrant Certificate for Warrant Shares, an amount equal to the product of (i) the number of Warrant Shares in respect of which this Warrant Certificate is then being exercised pursuant to **Sections 3** multiplied by (ii) the Exercise Price.

“**Bloomberg**” has the meaning set forth within the definition of VWAP.

“**Board**” means the board of directors of the Company.

“**Business Day**” means any day, except a Saturday, Sunday or legal holiday, on which banking institutions in the city of New York, New York are authorized or obligated by law or executive order to close.

“**Cashless Exercise**” has the meaning set forth in **Section 3(b)**.

“**Change in Control**” means a transaction or series of related transactions in which a Person, or a group of related Persons, that is not an affiliate of the Company or a stockholder, director or officer of the Company or an affiliate thereof, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company

“**Charter**” means the Company’s Seventh Amended and Restated Certificate of Incorporation filed with the Secretary of State of the State of Delaware on December 30, 2020 (as the same may be amended).

“**Common Stock**” means the common stock, par value \$0.001 per share, of the Company, and any capital stock into which such Common Stock shall have been converted, exchanged or reclassified following the date hereof.

“**Common Stock Deemed Outstanding**” means, at any given time, the sum of (i) the number of shares of Common Stock actually outstanding at such time, plus (ii) the number of shares of Common Stock issuable upon exercise of Options actually outstanding at such time, plus (iii) the number of shares of Common Stock issuable upon conversion or exchange of Convertible Securities actually outstanding at such time (treating as actually outstanding any Convertible Securities issuable upon exercise of Options actually outstanding at such time), in each case, regardless of whether the Options or Convertible Securities are actually exercisable at such time; provided that Common Stock Deemed Outstanding at any given time shall not include shares owned or held by or for the account of the Company or any of its wholly owned subsidiaries.

“**Common Stock Equivalents**” means any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, the Warrant Shares and any other debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“**Company**” has the meaning set forth in the preamble.

“**Convertible Securities**” means any debt, equity or other securities that are, directly or indirectly, convertible into or exchangeable for Common Stock.

“**Credit Agreement**” has the meaning set forth in the preamble.

“**Demand Registration**” has the meaning set forth in **Section 6(b)**.

“**DTC**” means the Depository Trust Company.

“**DWAC**” has the meaning set forth in **Section 3(i)**.

“**Excluded Issuance**” means (i) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants to, the Company pursuant to stock grants, option plans, purchase plans or other employee stock incentive programs or arrangements approved by the

Board or upon exercise of options or warrants granted to such parties pursuant to any such plan or arrangement; (ii) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the Issue Date, (iii) shares of Common Stock issued or issuable pursuant to any event for which adjustment is made pursuant to Section 4, (iv) shares of Common Stock issued in a registered public offering under the Securities Act pursuant to which all shares of Preferred Stock are automatically converted into Common Stock pursuant to the Company's Charter, and (v) any issuance of Warrant Shares upon the exercise of this Warrant Certificate.

"Exercise Certificate" has the meaning set forth in **Section 3(a)(i)**.

"Exercise Date" means, for any given exercise of this Warrant Certificate, whether in whole or in part, the date on which the conditions to such exercise as set forth in **Section 3** shall have been satisfied at or prior to 5:00 p.m., Eastern time, on a Business Day, including, without limitation, the receipt by the Company of the Exercise Certificate and the applicable Aggregate Exercise Price.

"Exercise Period" has the meaning set forth in **Section 2**.

"Exercise Price" means a per share price equal to \$76.92.

"Fair Market Value" means, if the Company's equity securities are listed on a Trading Market, as of any particular Trading Day, (i) the VWAP of such equity securities for such day or (ii) if there have been no sales on any Trading Market on any such day, the average of the highest bid and lowest asked prices for the Company's equity securities on all applicable Trading Markets at the end of such day. If the Company's equity securities are not listed, quoted or otherwise available for trading, the "Fair Market Value" of the applicable class of equity securities shall be the fair market value, per share, of such equity securities as determined jointly by the Board and the Holder.

"FAST" has the meaning set forth in **Section 3(i)**.

"Fundamental Change" means any event or circumstance that constitutes or results in (i) a Change in Control or (ii) a Liquidity Event.

"Holder" has the meaning set forth in the preamble.

"Investors Rights Agreement" means that certain Sixth Amended and Restated Investors' Rights Agreement by and among the Company, certain investors party thereto, and certain other parties dated as of December 30, 2020, as amended.

"Issue Date" has the meaning set forth in the preamble.

"Liquidity Event" means:

(a) a merger or consolidation in which the Company is a constituent party or a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except for (i) any such merger or consolidation with an entity that

is an affiliate of the Company or an affiliate of any shareholder of the Company or (ii) any such merger or consolidation involving the Company or a subsidiary in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation;

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or any subsidiary of the Company to an independent third party that is not an affiliate of the Company or an affiliate of any shareholder of the company of all or substantially all the assets of the Company and its subsidiaries taken as a whole or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Company if substantially all of the assets of the Company and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Company; or

(c) the liquidation, dissolution or winding up of the Company, whether voluntary or involuntary.

For the avoidance of doubt, a public offering of the capital stock of the Company or of any entity into which the Company has been merged or consolidated, shall not constitute a "Liquidity Event" for the purpose of this Warrant.

"Marketable Securities" means securities that (a) are tradable on an established national U.S. or non-U.S. stock exchange or reported through NASDAQ or a comparable established non-U.S. over-the-counter trading system and (b) are not subject to restrictions on transfer under the Securities Act or contractual restrictions on transfer.

"Nasdaq" means The Nasdaq Stock Market, Inc.

"Options" means any warrants or other rights or options to subscribe for or purchase Common Stock or Convertible Securities.

"OTC Bulletin Board" means the National Association of Securities Dealers, Inc. OTC Bulletin Board.

"Person" means any individual, sole proprietorship, partnership, limited liability company, corporation, joint venture, trust, incorporated organization or government or department or agency thereof.

"Preferred Stock" has the meaning stated in the Company's Charter.

"Prospectus" means the prospectus or prospectuses included in any Registration Statement, as amended or supplemented by any prospectus supplement with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement

and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus or prospectuses.

“**Purchase Rights**” has the meaning set forth in **Section 5**.

“**Registrable Securities**” shall mean (i) the Warrant Shares issuable upon the exercise of this Warrant Certificate and (ii) those securities defined as “Registrable Securities” under the Investors Rights Agreement. The parties hereto agree that, as such term is used in this Warrant Certificate and as such term is used in the Investors Rights Agreement, the Warrant Shares shall be deemed to be Registrable Securities for the purposes of the registration rights set forth in the Investors Rights Agreement at all times that the Holder has the right to acquire or obtain from the Company the Warrant Shares, whether or not such acquisition has actually been effected.

“**Registration Statement**” means any registration statement of the Company which covers any of the Registrable Securities, including the Prospectus, amendments and supplements to such Registration Statement, including post-effective amendments, all exhibits and all materials incorporated by reference in such Registration Statement.

“**Right of First Refusal and Co-Sale Agreement**” means that certain Sixth Amended and Restated Right of First Refusal and Co-Sale Agreement by and among the Company, certain investors party thereto, and certain other parties dated as of December 30, 2020, as amended.

“**SEC**” means the Securities and Exchange Commission or any successor thereto.

“**Securities Act**” means the Securities Act of 1933, as amended.

“**Series D Preferred Stock**” means the Series D Preferred Stock, par value \$0.001 per share, of the Company, and any capital stock into which such Series D Preferred Stock shall have been exchanged or reclassified following the date hereof.

“**Successor Entity**” means, with respect to any Fundamental Change as a result of which the Company will not be the surviving entity, the successor entity resulting from such Fundamental Change.

“**Trading Day**” means a day on which the principal Trading Market is open for trading.

“**Trading Market**” means Nasdaq or, if the Company’s equity securities are not listed on Nasdaq, such other principal US or foreign exchange or market (including the OTC Bulletin Board) on which the Company’s equity securities are quoted or available for trading.

“**Transfer Agent**” has the meaning set forth in **Section 3(c)(ii)**.

“**Unlegended Shares**” has the meaning set forth in **Section 12(a)(iii)**.

“**Unrestricted Conditions**” has the meaning set forth in **Section 12(a)(ii)**.

“**VWAP**” means, for any security as of any day or period of days (as the case may be), the volume weighted average sale price on Nasdaq as reported by, or based upon data reported by

Bloomberg Financial Markets or an equivalent, reliable reporting service reasonably acceptable to the Holder and the Company (collectively, "**Bloomberg**") or, if Nasdaq is not the principal trading market for such security, the volume weighted average sale price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg or, if no volume weighted average sale price is reported for such security by Bloomberg, then the last closing trade price of such security as reported by Bloomberg, or, if no last closing trade price is reported for such security by Bloomberg, the average of the bid prices of any market makers for such security that are listed in the over the counter market by the Financial Industry Regulatory Authority, Inc. or on the OTC Bulletin Board (or any successor) or in the "pink sheets" (or any successor) by the OTC Markets Group, Inc.; provided that if VWAP cannot be calculated for such security on such date in the manner provided above, the VWAP shall be the fair market value as mutually determined by the Company and the Holder.

"**Warrant**" or "**Warrant Certificate**" means this Warrant Certificate and all subsequent warrant certificates issued upon division, combination or transfer of, or in substitution for, this Warrant Certificate.

"**Warrant Register**" has the meaning set forth in **Section 7**.

"**Warrant Shares**" means the shares of Series D Preferred Stock, or other capital stock of the Company then purchasable upon exercise of this Warrant Certificate in accordance with the terms of this Warrant Certificate.

Section 2. Term of Warrant Certificate. Subject to the terms and conditions hereof, at any time or from time to time on or after the Issue Date and prior to 5:00 p.m., Eastern time, on the tenth anniversary of such date or, if such day is not a Business Day, on the next preceding Business Day (the "**Exercise Period**"), the Holder of this Warrant Certificate may exercise this Warrant Certificate for all or any part of the Warrant Shares purchasable hereunder (subject to adjustment as provided herein).

Section 3. Exercise of Warrant Certificate.

(a) **Exercise Procedure.** This Warrant Certificate may be exercised from time to time on any Business Day during the Exercise Period, for all or any part of the unexercised Warrant Shares, upon:

(i) delivery to the Company at its then principal executive office of an Exercise Certificate in the form attached hereto as **Exhibit A** (each, an "**Exercise Certificate**"), duly completed (including specifying the number of Warrant Shares to be purchased) and executed; and

(ii) payment to the Company of the Aggregate Exercise Price in accordance with **Section 3(b)**.

(b) **Payment of the Aggregate Exercise Price.** Payment of the Aggregate Exercise Price shall be made, at the option of the Holder as expressed in the Exercise Certificate, by any of the following methods:

(i) by delivery to the Company of a certified or official bank check payable to the order of the Company or by wire transfer of immediately available funds to an account designated in writing by the Company, in the amount of such Aggregate Exercise Price;

(ii) by instructing the Company to withhold a number of Warrant Shares then issuable upon exercise of this Warrant Certificate with an aggregate Fair Market Value as of the Exercise Date equal to such Aggregate Exercise Price;

(iii) by surrendering to the Company (x) Warrant Shares previously acquired by the Holder with an aggregate Fair Market Value as of the Exercise Date equal to such Aggregate Exercise Price or (y) any other securities or any debt of the Company (including shares of Common Stock or Series D Preferred Stock) having a value as of the Exercise Date equal to the Aggregate Exercise Price (which value (A) in the case of debt, shall be the principal amount thereof plus accrued and unpaid interest, (B) in the case of preferred stock (including the Series D Preferred Stock), shall be the liquidation value thereof plus accumulated and unpaid dividends, and (C) in the case of shares of Common Stock, shall be the Fair Market Value thereof); or

(iv) any combination of the foregoing.

In the event of any withholding of Warrant Shares or surrender of other equity securities pursuant to **Section 3(b)(ii), (iii) or (iv)** (solely to the extent of such withholding or surrender, a “**Cashless Exercise**”) where the number of shares whose value is equal to the Aggregate Exercise Price is not a whole number, the number of shares withheld by or surrendered to the Company shall be rounded up to the nearest whole share and the Company shall make a cash payment to the Holder (by delivery of a certified or official bank check or by wire transfer of immediately available funds) based on the incremental fraction of a share being so withheld by or surrendered to the Company in an amount equal to the product of (x) such incremental fraction of a share being so withheld or surrendered multiplied by (y) in the case of Series D Preferred Stock, the Fair Market Value per Warrant Share as of the Exercise Date, and, in all other cases, the value thereof as of the Exercise Date determined in accordance with **Section 3(b)(iii)(y)**.

For purposes of Rule 144, it is acknowledged and agreed that (i) the Warrant Shares issuable upon any exercise of this Warrant Certificate in any Cashless Exercise transaction shall be deemed to have been acquired on the Issue Date, and (ii) the holding period for any Warrant Shares issuable upon the exercise of this Warrant Certificate in any Cashless Exercise transaction shall be deemed to have commenced on the Issue Date.

(c) Delivery of Stock Certificates.

(i) With respect to any exercise of this Warrant Certificate by the Holder, upon receipt by the Company of an Exercise Certificate and delivery of the Aggregate Exercise Price (in accordance with **Section 3(b)**), the Company shall, within two (2) Business Days, issue and deliver (or cause its Transfer Agent to issue and deliver) in accordance with the terms hereof to or upon the order of the Holder that number Warrant Shares for the portion of this Warrant Certificate so exercised on such date, together with cash in lieu of any fraction of a share, as provided in **Section 3(d)**. The stock certificate or certificates so delivered shall be, to the extent possible, in such denomination or denominations as the exercising Holder shall reasonably request in the

Exercise Certificate and shall be registered in the name of the Holder or, subject to compliance with **Section 8**, such other Person's name as shall be designated in the Exercise Certificate. This Warrant Certificate shall be deemed to have been exercised and such certificate or certificates of Warrant Shares shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares for all purposes, as of the Exercise Date.

(ii) If, at the time of exercise, the Company has a Transfer Agent, then upon the exercise of this Warrant Certificate in whole or in part, the Company shall, at its own cost and expense, take all necessary action, including obtaining and delivering an opinion of counsel, to assure that the Company's transfer agent (the "**Transfer Agent**") shall issue Warrant Shares in the name of the Holder (or its nominee) or such other Persons as designated by the Holder (in compliance with **Section 8**) and in such denominations to be specified in the applicable Exercise Certificate. The Company represents and warrants that no instructions other than the foregoing instructions will be given to the Transfer Agent and that, unless waived by the Holder, this Warrant Certificate and the Warrant Shares will, if eligible at such time, be free-trading, and freely transferable, and will not contain a legend restricting the resale or transferability of the Warrant Shares if the Unrestricted Conditions are met.

(d) **Fractional Shares.** The Company shall not be required to issue a fractional Warrant Share upon exercise of any Warrant Certificate. As to any fraction of a Warrant Share that the Holder would otherwise be entitled to purchase upon such exercise, the Company shall pay to such Holder an amount in cash (by delivery of a certified or official bank check or by wire transfer of immediately available funds) equal to the product of (i) such fraction multiplied by (ii) the Fair Market Value of one Warrant Share on the Exercise Date.

(e) **Surrender of this Warrant Certificate; Delivery of New Warrant Certificate.**

(i) The Holder shall not be required to physically surrender this Warrant Certificate to the Company until the Holder has purchased all of the Warrant Shares available hereunder and this Warrant Certificate has been exercised in full, in which case, the Holder shall, at the written request of the Company, surrender this Warrant Certificate to the Company for cancellation within three (3) Business Days after the date the final Exercise Certificate is delivered to the Company. Partial exercises of this Warrant Certificate resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Holder and any assignee, by acceptance of this Warrant Certificate, acknowledge and agree that, by reason of the provisions of this **Section 3(e)**, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

(ii) Notwithstanding the foregoing, the Holder may request that the Company (and the Company shall), at the time of delivery of the certificate or certificates representing the Warrant Shares being issued in accordance with **Section 3(c)**, deliver to the Holder a new Warrant Certificate evidencing the rights of the Holder to purchase the unexpired and unexercised Warrant

Shares called for by this Warrant Certificate. Unless otherwise agreed upon by the Holder in its sole discretion, such new Warrant Certificate shall in all other respects be identical to this Warrant Certificate.

(f) **Valid Issuance of Warrant Certificate and Warrant Shares; Payment of Taxes.** The Company hereby represents, covenants and agrees:

(i) This Warrant Certificate is, and any Warrant Certificate issued in substitution for or replacement of this Warrant Certificate shall be, upon issuance, duly authorized and validly issued.

(ii) All Warrant Shares issuable upon the exercise of this Warrant Certificate (or any substitute or replacement Warrant Certificate) pursuant to the terms hereof shall be, upon issuance, and the Company shall take all such actions as may be necessary or appropriate in order that such Warrant Shares are, validly issued, fully paid and non-assessable, issued without violation of any preemptive or similar rights of any stockholder of the Company and free and clear of all taxes, liens and charges.

(iii) The Company shall take all such actions as may be necessary to ensure that all such Warrant Shares are issued without violation by the Company of any applicable law or governmental regulation or any requirements of any Trading Market upon which shares of Series D Preferred Stock, Common Stock or other securities constituting Warrant Shares may be listed at the time of such exercise (except for official notice of issuance which shall be immediately delivered by the Company upon each such issuance).

(iv) The Company shall cause the Warrant Shares, immediately upon such exercise, to be listed on any Trading Market upon which shares of Series D Preferred Stock, Common Stock or other securities constituting Warrant Shares are listed at the time of such exercise.

(v) The Company shall pay all expenses in connection with, and all taxes and other governmental charges that may be imposed with respect to, the issuance or delivery of Warrant Shares upon exercise of this Warrant Certificate.

(g) **Conditional Exercise.** Notwithstanding any other provision hereof, if an exercise of any portion of this Warrant Certificate is to be made in connection with a public offering or a Fundamental Change, such exercise may, at the election of the Holder, be conditioned upon the consummation of such transaction, in which case such exercise shall not be deemed to be effective until immediately prior to the consummation of such transaction.

(h) **Reservation of Shares.**

(i) During the Exercise Period, the Company shall at all times reserve and keep available out of its authorized but unissued shares of Series D Preferred Stock or other securities constituting Warrant Shares, solely for the purpose of issuance upon the exercise of this Warrant Certificate, the maximum number of Warrant Shares issuable upon the exercise of this Warrant Certificate, and the par value per Warrant Share shall at all times be less than or equal to the Exercise Price. The Company shall not increase the par value of any Warrant Shares receivable

upon the exercise of this Warrant Certificate above the Exercise Price, and shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Series D Preferred Stock upon the exercise of this Warrant Certificate.

(ii) During the Exercise Period, the Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock or such other securities into which the Warrant Shares may be convertible, solely for the purpose of issuance upon the conversion of the Warrant Shares, the maximum number of shares of Common Stock issuable upon the conversion of the Warrant Shares. The Company shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock or other securities upon the conversion of the Warrant Shares.

(i) **Delivery of Electronic Shares.** If the Company has a Transfer Agent and the Transfer Agent is participating in the DTC Fast Automated Securities Transfer (“*FAST*”) program, upon written request of the Holder and in lieu of delivering physical certificates representing any shares of Series D Preferred Stock or Common Stock (including any Warrant Shares) to be delivered under or in connection with this Warrant Certificate, the Company shall use its commercially reasonable efforts to cause the Transfer Agent to electronically transmit the such Series D Preferred Stock or Common Stock, as the case may be, to the Holder by crediting the account of the Holder’s prime broker with the DTC through its Deposit Withdrawal Agent Commission (“*DWAC*”) system. The time periods for delivery described herein shall apply to the electronic transmittals described herein. Any delivery not effected by electronic transmission shall be effected by delivery of physical certificates.

(j) **Dispute Resolution.** In the case of any dispute as to the determination of Fair Market Value, any closing sales price or VWAP of the Company’s Series D Preferred Stock or Common Stock, the arithmetic calculation of the Exercise Price or any other computation required to be made hereunder, in the event the Holder and the Company are unable to settle such dispute within five (5) Business Days, then either party may elect to submit the disputed matter(s) for resolution to a mutually agreeable investment bank. Such investment bank’s determination of such disputed matter(s) shall be binding upon all parties absent demonstrable error, and the Company and the Holder shall each pay one half of the fees and costs of such investment banker.

(k) **Automatic Exercise on a Liquidity Event.** If a Liquidity Event occurs with respect to the Company at any time prior to the expiration of the Exercise Period and there remain any Warrant Shares subject to this Warrant Certificate then, provided that the Fair Market Value of one Warrant Share (as determined in connection with the Liquidity Event) is greater than the Exercise Price:

(i) if the consideration to be received by the holders of the Company’s equity securities constituting Warrant Shares is cash and/or Marketable Securities, this Warrant shall be deemed automatically exercised, in full, without the requirement to deliver any Exercise Certificate, immediately prior to the closing of such Liquidity Event and the Holder shall receive, in the same proportions as the holders of the Company’s equity securities constituting Warrant Shares, such amounts of cash and/or Marketable Securities as the holders of the Company’s equity

securities constituting Warrant Shares (and if the holders of such equity securities are given any choice as to the cash or Marketable Securities to be received in such Liquidity Event, then the Holder shall be given the same choice); and

(ii) if the consideration to be received by the holders of the Company's equity securities constituting Warrant Shares is not cash and/or Marketable Securities (an "**Illiquid Sale**"), then, unless exercised by the Holder (in the Holder's sole discretion) prior to the consummation of such Illiquid Sale, (x) this Warrant shall remain outstanding and (y) upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Illiquid Sale, at the option of the Holder, the number of shares of equity securities of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "**Alternate Consideration**") receivable as a result of such Illiquid Sale by a holder of the number of shares of Warrant Shares for which this Warrant is exercisable immediately prior to such Illiquid Sale. For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of the equity securities constituting Warrant Shares in such Illiquid Sale, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of equity securities constituting Warrant Shares are given any choice as to the securities, cash or property to be received in an Illiquid Sale, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Illiquid Sale. The Company shall cause any Successor Entity in an Illiquid Sale to assume in writing all of the obligations of the Company under this Warrant pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Illiquid Sale and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of equity securities receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Illiquid Sale, and with an exercise price which applies the Exercise Price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Illiquid Sale and the value of such shares of capital stock, such number of shares of capital stock and such Exercise Price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Illiquid Sale), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Illiquid Sale, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Illiquid Sale, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein.

(l) **Automatic Exercise Prior to Expiration.** If immediately prior to the expiration of the Exercise Period there remain any Warrant Shares subject to this Warrant Certificate, and as of such time, the Fair Market Value of one Warrant Share is greater than the then applicable

Exercise Price, then this Warrant Certificate shall be deemed to have been automatically exercised by the Holder, in full, immediately prior to the expiration of the Exercise Period on a Cashless Exercise basis for the full number of remaining Warrant Shares, without the requirement for the delivery of an Exercise Certificate.

(m) **Holder's Exercise Limitations.** The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to this Section 3 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Exercise Certificate, the Holder (together with the Holder's affiliates, and any other persons acting as a group together with the Holder or any of the Holder's affiliates), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock Equivalents beneficially owned by the Holder and its affiliates shall include the number of shares of Common Stock Equivalents issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock Equivalents which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its affiliates, and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its affiliates. Except as set forth in the preceding sentence, for purposes of this Section 3(m), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 3(m) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any affiliates) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of an Exercise Certificate shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any affiliates) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 3(m), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the SEC, as the case may be, (B) a more recent public announcement by the Company, or (C) a more recent written notice from the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written request of a Holder, the Company shall within three (3) Business Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its affiliates since the date as of which such number of outstanding shares of Common Stock was reported. The "**Beneficial Ownership Limitation**" shall be 9.99% of the number of shares of Common Stock and Common Stock Equivalents outstanding immediately after giving

effect to the applicable issuance of Warrant Shares issuable upon exercise of this Warrant if at the time of exercise the Company is a “reporting issuer” under the Securities Exchange Act of 1934. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(m) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 4. Anti-Dilution Adjustments. Without duplication of any adjustment otherwise provided for in this Section 4, the number of shares of Common Stock issuable upon conversion of the Warrant Shares shall be subject to anti-dilution adjustment from time to time in the manner set forth in Article Fourth (B), Section 4 of the Charter as if the Warrant Shares were issued and outstanding on and as of the date of any such required adjustment; provided that any waiver by the Company’s stockholders of the protections set forth in Article Fourth (B), Section 4 of the Charter shall not be applicable to this Warrant or the number of shares of Common Stock issuable upon conversion of the Warrant Shares unless such waiver is consented to by the Holder.

(a) **Adjustment to Exercise Price and Number of Warrant Shares Upon Dividend, Subdivision or Combination of Series D Preferred Stock.** If the Company shall, at any time or from time to time after the Issue Date, (i) pay a dividend or make any other distribution upon the Series D Preferred Stock or any other capital stock of the Company payable in shares of Common Stock or in Options or Convertible Securities, or (ii) subdivide (by any stock split, recapitalization or otherwise) its outstanding shares of Series D Preferred Stock into a greater number of shares, the Exercise Price in effect immediately prior to any such dividend, distribution or subdivision shall be proportionately reduced and the number of Warrant Shares issuable upon exercise of this Warrant Certificate shall be proportionately increased. If the Company at any time combines (by combination, reverse stock split or otherwise) its outstanding shares of Series D Preferred Stock into a smaller number of shares, the Exercise Price in effect immediately prior to any such combination shall be proportionately increased and the number of Warrant Shares issuable upon exercise of this Warrant Certificate immediately prior to such combination shall be proportionately decreased. Any adjustment under this **Section 4(a)** shall become effective at the close of business on the date the dividend, subdivision or combination becomes effective.

(b) **Adjustment to Exercise Price and Number of Warrant Shares Upon Reorganization or Reclassification.**

(i) Unless the Holder otherwise consents (in its sole discretion), the event of any (A) capital reorganization of the Company, (B) reclassification of the stock of the Company (other than a change in par value or from par value to no par value or from no par value to par value or as a result of a stock dividend or subdivision, split-up or combination of shares), (C) Fundamental Change or (D) other similar transaction, including a Liquidity Event in which the Warrant Certificate is not exercised (each an “**Adjustment Event**”), in each case which entitles the holders of Series D Preferred Stock or Common Stock to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Series D Preferred Stock or Common Stock:

(1) this Warrant Certificate shall, immediately after such Adjustment Event remain outstanding and shall thereafter, in lieu of or in addition to (as the case may be) the number of Warrant Shares then exercisable under this Warrant Certificate, be exercisable for the kind and number of shares of stock or other securities or assets of the Company resulting from such transaction to which the Holder would have been entitled upon such Adjustment Event if the Holder had exercised this Warrant Certificate in full immediately prior to the time of such Adjustment Event and acquired the applicable number of Warrant Shares then issuable hereunder as a result of such exercise (without taking into account any limitations or restrictions on the exercisability of this Warrant Certificate); and

(2) appropriate adjustment (in form and substance reasonably satisfactory to the Holder) shall be made with respect to the Holder's rights under this Warrant Certificate to insure that the provisions of this **Section 4** shall thereafter be applicable, as nearly as possible, to this Warrant Certificate in relation to any shares of stock, securities or assets thereafter acquirable upon exercise of this Warrant Certificate.

The provisions of this **Section 4(b)** shall similarly apply to successive Adjustment Events and the Company shall not effect such Adjustment Event unless, prior to the consummation of such transaction, the successor entity has assumed the obligations of the Company under this Warrant Certificate by delivering to the Holder a written instrument substantially similar to this Warrant Certificate and reasonably satisfactory to the Holder.

(ii) Notwithstanding anything to the contrary contained herein, with respect to any corporate event or other transaction contemplated by this **Section 4(b)**, the Holder shall have the right to elect, prior to the consummation of such event or transaction, to exercise its rights under **Section 2** instead of giving effect to **Section 4(b)(i)**.

(c) **Certain Events.** If any event of the type contemplated by the provisions of this **Section 4** but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features) occurs, then the Board shall make an appropriate adjustment in the Exercise Price and the number of Warrant Shares issuable upon exercise of this Warrant Certificate so as to protect the rights of the Holder in a manner consistent with the provisions of this **Section 4**; provided that no such adjustment pursuant to this **Section 4(c)** shall increase the Exercise Price or decrease the number of Warrant Shares issuable hereunder as otherwise determined pursuant to this **Section 4**.

(d) **Certificate as to Adjustment.**

(i) As promptly as reasonably practicable following any adjustment of the Exercise Price or the number of Warrant Shares issuable upon exercise of this Warrant Certificate, but in any event not later than three (3) Business Days thereafter, the Company shall furnish to the Holder a certificate of an executive officer setting forth in reasonable detail such adjustment and the facts upon which it is based and certifying the calculation thereof.

(ii) As promptly as reasonably practicable following the receipt by the Company of a written request by the Holder, but in any event not later than three (3) Business Days thereafter, the Company shall furnish to the Holder a certificate of an executive officer

certifying the Exercise Price then in effect and the number of Warrant Shares for which this Warrant Certificate is exercisable, or the amount, if any, of other shares of stock, securities or assets then issuable upon exercise of this Warrant Certificate.

(e) **Notices.** In the event that the Company shall take a record of the holders of its Series D Preferred Stock (or other capital stock or securities at the time issuable upon exercise of this Warrant Certificate):

(i) for the purpose of entitling or enabling them to receive any dividend or other distribution, to vote at a meeting (or by written consent), to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(ii) approving or enabling any capital reorganization of the Company, any reclassification of the Series D Preferred Stock of the Company or any Fundamental Change;

then, and in each such case, the Company shall send or cause to be sent to the Holder at least thirty (30) days prior to the applicable record date or the applicable expected effective date, as the case may be, for the event, a written notice specifying, as the case may be, (A) the record date for such dividend, distribution, meeting or consent or other right or action, and a description of such dividend, distribution or other right or action to be taken at such meeting or by written consent, or (B) the effective date on which such Fundamental Change is proposed to take place, and the date, if any is to be fixed, as of which the books of the Company shall close or a record shall be taken with respect to which the holders of record of Series D Preferred Stock (or such other capital stock or securities at the time issuable upon exercise of this Warrant Certificate) shall be entitled to exchange their shares of Series D Preferred Stock (or such other capital stock or securities) for securities or other property deliverable upon such Fundamental Change, and the amount per share and character of such exchange applicable to this Warrant Certificate and the Warrant Shares.

Section 5. Purchase Rights. In addition to any adjustments pursuant to **Section 4**, if at any time the Company grants, issues or sells (other than in an Excluded Issuance) any shares of Common Stock, Options, Convertible Securities or rights to purchase capital stock, securities or other property over which the holders of Series D Preferred Stock have a preemptive purchase right (the “**Purchase Rights**”), then the Holder shall be entitled (but not required) to acquire, upon the same terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder would have acquired if the Holder had held the number of Warrant Shares acquirable upon complete exercise of this Warrant Certificate immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Series D Preferred Stock are to be determined for the grant, issue or sale of such Purchase Rights.

Section 6. Registration Rights.

(a) **Investors Rights Agreement.** The Company and the Holder agree that, as of the Issue Date:

(i) The Warrant Shares and the Holder shall have certain registration rights pursuant to and as set forth in the Investors Rights Agreement, including rights to have the Warrant

Shares issuable upon exercise of this Warrant Certificate included in a Registration Statement initiated pursuant to Section 2.1 (Demand Registration) or Section 2.2 (Company Registration) of the Investors Rights Agreement;

(ii) The Holder shall be deemed to be a “Holder” and a “Major Investor” for the purpose of exercising all rights granted to “Holders” and “Major Investors” (as defined in the Investors Rights Agreement) under the Investors Rights Agreement;

(iii) The Warrant Shares shall be “Registrable Securities” under the Investors Rights Agreement for the purpose of exercising all rights attached to the Registrable Securities under the Investors Rights Agreement, including prior to exercise of this Warrant Certificate, provided that, for the avoidance of doubt, the Holder may not require that the Warrant Shares be registered on a Trading Market unless and until this Warrant Certificate has been validly exercised with respect to the Warrant Shares to be so registered and such Warrant Shares are eligible to be so registered in accordance with applicable law; and

(iv) The provisions set forth in the Investors Rights Agreement, or any similar or replacement agreement relating to the registration rights of Registrable Securities (including the Warrant Shares), may not be amended, modified or waived without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Warrant Shares in the same manner as such amendment, modification, or waiver affects the rights associated with all other shares of the same series and class as the Warrant Shares.

(b) **Rule 144 Reporting.** For the avoidance of doubt, the Holder shall be a “Holder” (as defined in the Investors Rights Agreement) for all purposes of Section 2.9 (Reports Under Exchange Act) of the Investors Rights Agreement.

Section 7. Warrant Register. The Company shall keep and properly maintain at its principal executive offices a register (the “**Warrant Register**”) for the registration of this Warrant Certificate and any transfers thereof. The Company may deem and treat the Person in whose name this Warrant Certificate is registered on such register as the Holder thereof for all purposes, and the Company shall not be affected by any notice to the contrary, except any assignment, division, combination or other transfer of this Warrant Certificate effected in accordance with the provisions of this Warrant Certificate.

Section 8. Transfer of Warrant Certificate. Subject to **Section 12** hereof, this Warrant Certificate and all rights hereunder are transferable, in whole or in part, by the Holder without charge to the Holder, upon surrender of this Warrant Certificate to the Company at its then principal executive offices with a properly completed and duly executed Assignment in the form attached hereto as **Exhibit B**, together with funds sufficient to pay any transfer taxes described in **Section 3(f)(v)** in connection with the making of such transfer. Upon such compliance, surrender and delivery and, if required, such payment, the Company shall execute and deliver a new Warrant Certificate or Warrant Certificates in the name of the assignee or assignees and in the denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant Certificate evidencing the portion of this Warrant Certificate, if any, not so assigned and this Warrant Certificate shall promptly be cancelled.

Section 9. The Holder Not Deemed a Stockholder; Limitations on Liability; Right to Receive Stockholder Notices. Except as otherwise specifically provided herein, prior to the issuance to the Holder of the Warrant Shares to which the Holder is then entitled to receive upon the due exercise of this Warrant Certificate, the Holder shall not be entitled to vote or receive dividends or be deemed the holder of shares of capital stock of the Company for any purpose, nor shall anything contained in this Warrant Certificate be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise. In addition, nothing contained in this Warrant Certificate shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant Certificate or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this **Section 9**, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders, including without limitation the financial information set forth in Section 3.1 of the Investors Rights Agreement and notices relating to any right of first offer or tag along right set forth in the Investors Rights Agreement and the Right of First Refusal and Co-Sale Agreement.

Section 10. Replacement on Loss; Division and Combination.

(a) **Replacement of Warrant Certificate on Loss.** Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant Certificate and upon delivery of an indemnity reasonably satisfactory to it (it being understood that a written indemnification agreement or affidavit of loss of the Holder shall be a sufficient indemnity) and, in case of mutilation, upon surrender of such Warrant Certificate for cancellation to the Company, the Company at its own expense shall execute and deliver to the Holder, in lieu hereof, a new Warrant Certificate of like tenor and exercisable for an equivalent number of Warrant Shares as this Warrant Certificate so lost, stolen, mutilated or destroyed; provided that, in the case of mutilation, no indemnity shall be required if this Warrant Certificate in identifiable form is surrendered to the Company for cancellation.

(b) **Division and Combination of Warrant Certificate.** Subject to compliance with the applicable provisions of this Warrant Certificate as to any transfer or other assignment which may be involved in such division or combination, this Warrant Certificate may be divided or, following any such division of this Warrant Certificate, subsequently combined with other Warrant Certificates, upon the surrender of this Warrant Certificate or Warrant Certificates to the Company at its then principal executive offices, together with a written notice specifying the names and denominations in which new Warrant Certificates are to be issued, signed by the respective Holders or their agents or attorneys. Subject to compliance with the applicable provisions of this Warrant Certificate as to any transfer or assignment which may be involved in such division or combination, the Company shall at its own expense execute and deliver a new Warrant Certificate or Warrant Certificates in exchange for this Warrant Certificate or Warrant Certificates so surrendered in accordance with such notice. Such new Warrant Certificate or Warrant Certificates shall be of like tenor to the surrendered Warrant Certificate or Warrant Certificates and shall be

exercisable in the aggregate for an equivalent number of Warrant Shares as this Warrant Certificate or Warrant Certificates so surrendered in accordance with such notice.

Section 11. No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or Bylaws, through any shareholders, voting or similar agreement, or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed by it hereunder, but shall at all times in good faith assist in the carrying out of all the provisions of this Warrant Certificate and in the taking of all such action as may reasonably be requested by the Holder in order to protect the exercise rights of the Holder against dilution or other impairment, consistent with the tenor and purpose of this Warrant Certificate.

Section 12. Compliance with the Securities Act.

(a) Agreement to Comply with the Securities Act, etc.

(i) **Legend.** The Holder, by acceptance of this Warrant Certificate, agrees to comply in all respects with the provisions of this **Section 12** and the restrictive legend requirements set forth on the face of this Warrant Certificate and further agrees that such Holder shall not offer, sell or otherwise dispose of this Warrant Certificate or any Warrant Shares to be issued upon exercise hereof except under circumstances that will not result in a violation of the Securities Act. Subject to **clause (ii)** below, this Warrant Certificate and all Warrant Shares issued upon exercise of this Warrant Certificate (unless registered under the Securities Act) shall be stamped or imprinted with a legend in substantially the following form:

“THIS WARRANT CERTIFICATE AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “**ACT**”), OR QUALIFIED UNDER ANY STATE OR FOREIGN SECURITIES LAWS AND MAY NOT BE OFFERED FOR SALE, SOLD, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED OR ASSIGNED UNLESS (I) A REGISTRATION STATEMENT COVERING SUCH SHARES IS EFFECTIVE UNDER THE ACT AND IS QUALIFIED UNDER APPLICABLE STATE AND FOREIGN LAW OR (II) THE TRANSACTION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS UNDER THE ACT AND THE QUALIFICATION REQUIREMENTS UNDER APPLICABLE STATE AND FOREIGN LAW AND, IF THE COMPANY REQUESTS, AN OPINION SATISFACTORY TO THE COMPANY TO SUCH EFFECT HAS BEEN RENDERED BY COUNSEL.”

(ii) **Removal of Restrictive Legends.** Neither this Warrant Certificate nor any certificates evidencing Warrant Shares or any other shares of Common Stock issuable or deliverable under or in connection with this Warrant Certificate shall contain any legend restricting the transfer thereof (including the legend set forth above in **clause (i)**) in any of the following

circumstances: (A) while a Registration Statement covering the sale or resale of Warrant Shares is effective under the Securities Act, (B) following any sale of this Warrant Certificate, any Warrant Shares or any other shares of Common Stock issued or delivered to the Holder under or in connection here with pursuant to Rule 144, (C) if this Warrant Certificate, Warrant Shares or any other such share of Common Stock are eligible for sale under Rule 144(b)(1), or (D) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the SEC) (collectively, the “**Unrestricted Conditions**”). The Company shall at its own cost and expense cause its counsel to issue a legal opinion to the Transfer Agent if required by such Transfer Agent to effect the issuance of Warrant Shares or the or any other shares of equity securities issuable or deliverable under or in connection with this Warrant Certificate, as applicable, without a restrictive legend or removal of the legend hereunder. If the Unrestricted Conditions are met at the time of issuance of this Warrant Certificate, the Warrant Shares or such other shares of equity securities, then this Warrant Certificate, Warrant Shares or other equity securities, as the case may be, shall be issued free of all legends.

(iii) **Replacement Warrant Certificate.** The Company agrees that at such time as the Unrestricted Conditions have been satisfied it shall promptly (but in any event within three (3) Business Days) following written request from the Holder issue a replacement Warrant Certificate or replacement Warrant Shares or replacement shares in respect of such other Common Stock, as the case may be, free of all restrictive legends.

(iv) **Sale of Unlegended Shares.** The Holder agrees that the removal of the restrictive legend from this Warrant Certificate and any certificates representing securities as set forth in **Section 12(a)(ii)** above is predicated upon the Company’s reliance that the Holder will sell this Warrant Certificate or any such securities pursuant to either an effective Registration Statement or otherwise pursuant to the requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom, and that if such securities are sold pursuant to a Registration Statement, they will be sold in compliance with the plan of distribution set forth therein.

(b) **Representations of the Holder.** In connection with the issuance of this Warrant Certificate, the Holder specifically represents, as of the date hereof, to the Company by acceptance of this Warrant Certificate as follows:

(i) The Holder is an “accredited investor” as defined in Rule 501 of Regulation D promulgated under the Securities Act. The Holder is acquiring this Warrant Certificate and the Warrant Shares to be issued upon exercise hereof for investment for its own account and not with a view towards, or for resale in connection with, the public sale or distribution of this Warrant Certificate or the Warrant Shares, except pursuant to sales registered or exempted under the Securities Act.

(ii) The Holder understands and acknowledges that this Warrant Certificate and the Warrant Shares to be issued upon exercise hereof are “restricted securities” under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that, under such laws and applicable regulations, such securities may be resold without registration under the Securities Act only in certain limited circumstances.

In addition, the Holder represents that it is familiar with Rule 144 under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

(iii) The Holder acknowledges that it can bear the economic and financial risk of its investment for an indefinite period, and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in this Warrant Certificate and the Warrant Shares. The Holder has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant Certificate and the business, properties, prospects and financial condition of the Company.

Section 13. Representations, Warranties and Covenants of the Company. The Company represents, warrants and covenants to the Holder that:

(i) the Company has the legal capacity or corporate power and authority to enter into this Warrant Certificate and to carry out its obligations hereunder. The Company is duly organized and validly existing under the laws of its jurisdiction of organization, and the execution of this Warrant Certificate and the consummation of the transactions contemplated herein have been duly authorized by all necessary action. No other act or proceeding, corporate or otherwise, on its part is necessary to authorize the execution of this Warrant Certificate or the consummation of any of the transactions contemplated hereby thereby. This Warrant Certificate has been duly executed by the Company and constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms of this Warrant Certificate;

(ii) no consent, waiver, approval, authorization, exemption, registration, license or declaration is required to be made or obtained by the Company, other than those which have been made or obtained, in connection with (i) the execution or enforceability of this Warrant Certificate or (ii) the consummation of any of the transactions contemplated hereby;

(iii) as of the date hereof, and after giving effect to the transactions contemplated hereby, Schedule I sets forth (a) the authorized capital stock of the Company; (b) the number of shares of capital stock issued and outstanding; (c) the number of shares of capital stock issuable pursuant to the Company's stock plans; and (d) the number of shares of capital stock issuable and reserved for issuance pursuant to securities exercisable for, or convertible into or exchangeable for any shares of capital stock of the Company. All of the issued and outstanding shares of capital stock of the Company have been duly authorized and are validly issued, are fully paid and nonassessable and, except as set forth on Schedule I are not subject to any preemptive rights, rights of first refusal or similar rights, and were issued in compliance with applicable state and federal securities laws and any rights of third parties. Except as described on Schedule I, there are no outstanding warrants, options, convertible securities or other rights, agreements or arrangements of any character under which the Company and any of its subsidiaries is or may be obligated to issue any equity securities of any kind and neither the Company nor any of its subsidiaries is currently in negotiations for the issuance of any equity securities of any kind;

(iv) all Warrant Shares issuable and deliverable pursuant to this Warrant Certificate shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable and

free from all taxes, liens and charges created by the Company in respect of the original issuance thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue);

(v) the issuance of this Warrant Certificate shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant Certificate;

(vi) the Warrant Shares, when issued and paid for in accordance with the terms of this Warrant Certificate, will be issued free and clear of all security interests, claims, liens and other encumbrances other than restrictions imposed by applicable securities laws;

(vii) the Company will take all such action as may be reasonably necessary to assure that the shares constituting Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the shares constituting Warrant Shares may be listed.

Section 14. Notices. All notices, requests, consents, claims, demands, waivers and other communications hereunder shall be in writing and shall be deemed to have been given: (a) when delivered by hand (with written confirmation of receipt); (b) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by facsimile or e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient; or (d) on the third day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the addresses indicated below (or at such other address for a party as shall be specified in a notice given in accordance with this **Section 14**).

If to the Company: IsoPlexis Corporation
 35 Northeast Industrial Road
 Branford, Connecticut 06405
 Attention: John Strahley
 E-mail: john.strahley@isoplexis.com

with a copy to: Wiggin and Dana LLP
 One Century Tower
 265 Church Street
 New Haven, Connecticut 06510
 Attention: Evan Kipperman
 E-mail: ekipperman@wiggin.com

If to the Holder: Perceptive Credit Holdings III, LP
 c/o Perceptive Advisors LLC
 51 Astor Place, 10th Floor
 New York, NY 10003
 Attention: Sandeep Dixit

E-mail: Sandeep@perceptivelife.com
PCOFReporting@perceptivelife.com

with a copy to: Chapman and Cutler LLP
1270 Avenue of the Americas
New York, NY 10020
Attention: Nicholas Whitney
whitney@chapman.com

Section 15. Cumulative Remedies. Except to the extent expressly provided in **Section 8** to the contrary, the rights and remedies provided in this Warrant Certificate are cumulative and are not exclusive of, and are in addition to and not in substitution for, any other rights or remedies available at law, in equity or otherwise.

Section 16. Equitable Relief. Each of the Company and the Holder acknowledges that a breach or threatened breach by such party of any of its obligations under this Warrant Certificate would give rise to irreparable harm to the other party hereto for which monetary damages would not be an adequate remedy and hereby agrees that in the event of a breach or a threatened breach by such party of any such obligations, the other party hereto shall, in addition to any and all other rights and remedies that may be available to it in respect of such breach, be entitled to seek equitable relief, including a restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction. The Holder and the Company further acknowledge and agree that (i) the amount of loss or damages likely to be incurred by the Holder as a result of the Company's breach of any its obligations hereunder is incapable or is difficult to precisely estimate and (ii) the parties hereto are sophisticated business parties and have been represented by sophisticated and able legal and financial counsel and negotiated this Agreement at arm's length.

Section 17. Entire Agreement. This Warrant Certificate constitutes the sole and entire agreement of the parties to this Warrant Certificate with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, both written and oral, with respect to such subject matter.

Section 18. Successor and Assigns. This Warrant Certificate and the rights evidenced hereby shall be binding upon and shall inure to the benefit of the parties hereto and the successors of the Company and the successors and permitted assigns of the Holder. Such successors and/or permitted assigns of the Holder shall be deemed to be a "Holder" for all purposes hereunder.

Section 19. No Third-Party Beneficiaries. This Warrant Certificate is for the sole benefit of the Company and the Holder and their respective successors and, in the case of the Holder, permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant Certificate.

Section 20. Headings. The headings in this Warrant Certificate are for reference only and shall not affect the interpretation of this Warrant Certificate.

Section 21. Amendment and Modification; Waiver. Except as otherwise provided herein, this Warrant Certificate may only be amended, modified or supplemented by an agreement in writing signed by each party hereto. No waiver by the Company or the Holder of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant Certificate shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

Section 22. Severability. If any term or provision of this Warrant Certificate is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant Certificate or invalidate or render unenforceable such term or provision in any other jurisdiction.

Section 23. Governing Law. This Warrant Certificate shall be governed by and construed in accordance with the internal laws of the State of New York without giving effect to any choice or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of New York.

Section 24. Submission to Jurisdiction. Any legal suit, action or proceeding arising out of or based upon this Warrant Certificate or the transactions contemplated hereby may be instituted in the federal courts of the United States of America or the courts of the State of New York in each case located in the city of New York and County of New York, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by certified or registered mail to such party's address set forth herein shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or any proceeding in such courts and irrevocably waive and agree not to plead or claim in any such court that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

Section 25. Waiver of Jury Trial. Each of the Company and the Holder acknowledges and agrees that any controversy which may arise under this Warrant Certificate is likely to involve complicated and difficult issues and, therefore, each such party irrevocably and unconditionally waives any right it may have to a trial by jury in respect of any legal action arising out of or relating to this Warrant Certificate or the transactions contemplated hereby.

Section 26. Counterparts. This Warrant Certificate may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Warrant Certificate delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Warrant Certificate.

Section 27. No Strict Construction. This Warrant Certificate shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has duly executed this Warrant Certificate on the Issue Date.

ISOPLEXIS CORPORATION

By /s/ Sean Mackay

Name: Sean Mackay

Title: President and Chief Executive Officer

Accepted and agreed,

PERCEPTIVE CREDIT HOLDINGS III, LP

By /s/ Sandeep Dixit

Name: Sandeep Dixit

Title: Chief Credit Officer

By /s/ Sam Chawla

Name: Sam Chawla

Title: Portfolio Manager

CRAVATH, SWAINE & MOORE LLP

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KIMBERLY A. GROUSSET
ANDREI HARASYMIAK

, 2021

IsoPlexis Corporation
Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel for IsoPlexis Corporation, a Delaware corporation (the “Company”), in connection with the registration statement on Form S-1, as amended (Registration No. 333-) (the “Registration Statement”), filed with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Securities Act”), with respect to the registration of shares of common stock, par value \$0.001 per share, of the Company (the “Shares”), and, if the over-allotment option is exercised, the offer and sale by the Company of additional shares (the “Additional Shares”) to the underwriters (the “Underwriters”) pursuant to the terms of the underwriting agreement (the “Underwriting Agreement”) to be executed by the Company and Morgan Stanley & Co. LLC, Cowen and Company, LLC, Evercore Group, L.L.C. and SVB Leerink LLC, as Representatives of the Underwriters.

In that connection, we have examined originals, or copies certified or otherwise identified to our satisfaction, of such documents, corporate records and other instruments as we have deemed necessary or appropriate for the purposes of this opinion, including, without limitation: (a) the Eighth Amended and Restated Certificate of Incorporation of the Company; (b) the Amended and Restated By-laws of the Company; and (c) certain resolutions adopted by the Board of Directors of the Company.

In rendering our opinion, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such

latter documents. As to all questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

Based on the foregoing and in reliance thereon, we are of opinion that the Shares and the Additional Shares have been duly and validly authorized and, when issued and delivered by the Company and paid for by the Underwriters pursuant to the Underwriting Agreement, will be validly issued, fully paid and non-assessable.

We are admitted to practice in the State of New York, and we express no opinion as to matters governed by any laws other than the laws of the State of New York, the General Corporation Law of the State of Delaware and the Federal laws of the United States of America. The reference and limitation to "General Corporation Law of the State of Delaware" includes the statutory provisions and all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement. We also consent to the reference to our firm under the caption "Legal Matters" in the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

IsoPlexis Corporation
35 NE Industrial Rd
Branford, CT 06405

O

CREDIT AGREEMENT AND GUARANTY

DATED AS OF

DECEMBER 30, 2020

AMONG

ISOPLEXIS CORPORATION,
AS BORROWER,

THE GUARANTORS FROM TIME TO TIME PARTY HERETO,
AS GUARANTORS,

THE LENDERS FROM TIME TO TIME PARTY HERETO,
AS LENDERS,

AND

PERCEPTIVE CREDIT HOLDINGS III, LP,
AS ADMINISTRATIVE AGENT AND AS A LENDER

\$50,000,000

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EXHIBITS:

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EXHIBIT F	—	Form of Assignment Agreement
EXHIBIT G	—	Form of Security Agreement
EXHIBIT H-1	—	Form of Patent & Trademark Security Agreement
EXHIBIT H-2	—	Form of Copyright Security Agreement
EXHIBIT I	—	Form of Collateral Questionnaire

CREDIT AGREEMENT AND GUARANTY, dated as of December 30, 2020 (this “*Agreement*”), among ISOPLEXIS CORPORATION, a Delaware corporation (“*Borrower*”), certain Guarantors from time to time parties hereto, the lenders from time to time party hereto (each, as a “*Lender*” and collectively, the “*Lenders*”), and PERCEPTIVE CREDIT HOLDINGS III, LP, a Delaware limited partnership (“*Perceptive*”), as administrative agent for the Lenders (in such capacity, together with its successors and assigns, the “*Administrative Agent*”).

WITNESSETH:

Borrower has requested the Lenders to make term loans to Borrower, and the Lenders are prepared to make such loans on and subject to the terms and conditions hereof. Accordingly, the parties agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Certain Defined Terms. As used herein, the following terms have the following respective meanings:

“*Accounting Change*” has the meaning set forth in Section 1.02.

“*Accounting Change Notice*” has the meaning set forth in Section 1.02.

“*Acquisition*” means any transaction, or any series of related transactions, by which any Person directly or indirectly, by means of a take-over bid, tender offer, amalgamation, merger, purchase of assets, or similar transaction having the same effect as any of the foregoing, (a) acquires all or substantially all of the assets of any Person engaged in any business, (b) acquires all or substantially all of a business line or unit or division of any other Person, (c) acquires control of securities of a Person engaged in a business representing more than 50% of the ordinary voting power for the election of directors or other governing body if the business affairs of such Person are managed by a Board or other governing body, or (d) acquires control of more than 50% of the ownership interest in any Person engaged in any business that is not managed by a Board or other governing body.

“*Act*” has the meaning set forth in Section 13.16.

“*Administrative Agent*” has the meaning set forth in the introduction hereto.

“*Affected Financial Institution*” means (a) any EEA Financial Institution or (b) any UK Financial Institution.

“*Affiliate*” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“*Agreement*” has the meaning set forth in the introduction hereto.

“*Anti-Corruption Laws*” means all laws, rules and regulations of any jurisdiction applicable to the Obligors and their Affiliates concerning or relating to bribery or corruption, including, without limitation, the Foreign Corrupt Practices Act of 1977, as amended.

“*Anti-Terrorism Laws*” means any laws or regulations relating to terrorism or money laundering, including, without limitation the *Bank Secrecy Act* (31 U.S.C. §§ 5311 *et seq.*), the *Money Laundering Control Act of 1986* (18 U.S.C. §§ 1956 *et seq.*), the USA Patriot Act and any similar law enacted in the United States after the date of this Agreement.

“*Applicable Margin*” means 9.50% per annum, as such percentage may be increased by Section 3.02(d).

“*Approved Fund*” means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“*Asset Sale*” has the meaning set forth in Section 9.09.

“*Assignment Agreement*” means an assignment and assumption entered into by a Lender and an assignee of such Lender in substantially the form of Exhibit F.

“*Bail-In Action*” means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

“*Bail-In Legislation*” means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

“*Bankruptcy Code*” means Title 11 of the United States Code entitled “Bankruptcy.”

“Beneficial Ownership Regulation” has the meaning set forth in Section 13.16.

“Benefit Plan” means any employee benefit plan as defined in Section 3(3) of ERISA to which any Obligor or Subsidiary thereof incurs or otherwise has any obligation or liability, contingent or otherwise.

“Board” means, with respect to any Person, the board of directors (or equivalent governing body) of such Person or any Committee thereof.

“Borrower” has the meaning set forth in the introduction hereto.

“Borrowing” means a borrowing consisting of a Tranche A Loan made by the Lenders on the Closing Date or a Tranche B Loan made by the Lenders on the Tranche B Loan Borrowing Date, as applicable.

“Borrowing Notice” means a notice substantially in the form attached hereto as Exhibit B.

“Business Day” means a day (other than a Saturday or Sunday) on which commercial banks are not authorized or required to close in New York City and, when determined in connection with notices and determinations in respect of LIBOR or any Loan or any funding, Interest Period or any payments in respect of the Loans, that is also a day on which dealings in dollar deposits are carried on in the London interbank market.

“Capital Lease Obligations” means, as to any Person, the obligations of such Person to pay rent or other amounts under a lease of (or other agreement conveying the right to use) real and/or personal Property which obligations are required to be classified and accounted for as a capital lease on a balance sheet of such Person under GAAP and, for purposes of this Agreement, the amount of such obligations shall be the capitalized amount thereof, determined substantially in accordance with GAAP; *provided* that any obligations that were not required to be included on the balance sheet of such Person as capital lease obligations when incurred (whether now outstanding or at any time incurred or entered into) but are subsequently re-characterized as capital lease obligations due to a change in accounting rules under GAAP after the Closing Date shall for all purposes hereunder not be treated as a Capital Lease Obligation.

“Casualty Event” means any actual or constructive loss, condemnation, destruction, confiscation, requisition, seizure or forfeiture of all or any material portion of the assets of Borrower or any other Obligor, excluding only those assets, individually or in the aggregate, subject to any such event during any calendar year with a fair market value as of the date thereof equal to or less than \$1,000,000.

“Change of Control” means (a) any “person” or “group” (within the meaning of Rule 13d-5 of the Exchange Act as in effect on the date hereof) shall own, directly or indirectly, beneficially or of record, shares representing 40% or more of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests of Borrower, (b) Borrower ceases to directly own, beneficially and of record, 100% of the issued and outstanding Equity Interests of each of its Subsidiaries, or (c) during any period of twelve (12) consecutive calendar months, the occupation of a majority of the seats (other than vacant seats) on the Board of Borrower by Persons who were

neither (i) nominated by the Board of Borrower, nor (ii) appointed by directors on the Board of Borrower on the Closing Date.

“Claims” includes claims, litigation, demands, complaints, grievances, actions, applications, suits, causes of action, orders, charges, indictments, prosecutions, information (brought by a public prosecutor without grand jury indictment) or other similar processes, assessments or reassessments.

“CLIA” means the Clinical Laboratory Improvement Amendments (CLIA) of 1988, as amended from time to time, and the rules, regulations, guidelines, guidance documents and compliance policy guides issued or promulgated thereunder.

“Closing Date” means the Business Day on which all of the conditions set forth in Section 6.01 have been satisfied or waived by the Lenders and the Tranche A Loan is made.

“Closing Fee” has the meaning set forth in Section 2.03.

“Code” means the Internal Revenue Code of 1986, as amended from time to time.

“Collateral” means any Property in which a Lien is purported to be granted under any of the Security Documents (or all such Property, as the context may require).

“Collateral Questionnaire” means that certain Collateral Questionnaire and certification by a Responsible Officer of Borrower substantially in the form of attached hereto as Exhibit I and otherwise in form and substance satisfactory to the Administrative Agent.

“Commitment” means, with respect to each Lender, such Lender’s (a) Tranche A Loan Commitment and (b) Tranche B Loan Commitment, and “Commitments” means all such commitments of all Lenders. The aggregate Commitments of all Lenders as of the Closing Date is \$50,000,000.

“Committee” means, with respect to any board of directors (or other governing body), any committee thereof duly authorized to act on behalf of such board of directors (or other governing body).

“Commodity Account” has the meaning set forth in the Security Agreement.

“Compliance Certificate” has the meaning set forth in Section 8.01(d).

“*Connection Income Taxes*” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“*Contracts*” means any contract, license, lease, agreement, obligation, promise, undertaking, understanding, arrangement, document, commitment, entitlement or engagement under which a Person has, or will have, any liability or contingent liability (in each case, whether

written or oral, express or implied, and whether in respect of monetary or payment obligations, performance obligations or otherwise), excluding the Loan Documents.

“*Control*” means, in respect of a particular Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ability to exercise voting power, by contract or otherwise. “*Controlling*” and “*Controlled*” have meanings correlative thereto.

“*Controlled Account*” has the meaning set forth in Section 8.17(a)(i).

“*Copyrights*” has the meaning set forth in the Security Agreement.

“*Default*” means any Event of Default and any event that, upon the giving of notice, the lapse of time or both, would constitute an Event of Default.

“*Default Rate*” has the meaning set forth in Section 3.02(d).

“*Deposit Account*” has the meaning set forth in the Security Agreement and relates to such accounts located and/or maintained in the United States of America.

“*Designated Person*” means a person or entity:

(a) listed in the annex to, or otherwise targeted by the provisions of, the Executive Order (as disclosed by World-Check or another reputable commercially available database);

(b) named as a “Specially Designated National and Blocked Person” on the most current list published by OFAC at its official website or any replacement website or other replacement official publication of such list (as disclosed by World-Check or another reputable commercially available database); or

(c) with which the Lenders are prohibited from dealing or otherwise engaging in any transaction by any Economic Sanctions Laws.

“*Device*” means any instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related item, including any component, part or accessory, developed by the Obligor.

“*Disqualified Equity Interests*” means, with respect to any Person, any Equity Interest of such Person that, by its terms (or by the terms of any security or other Equity Interest into which it is convertible or for which it is exchangeable upon exercise or otherwise), or upon the happening of any event or condition (i) matures or is mandatorily redeemable (other than solely for Qualified Equity Interests), including pursuant to a sinking fund obligation or otherwise, (ii) is redeemable at the option of the holder thereof (other than solely for Qualified Equity Interests), in whole or in part, (iii) provides for the scheduled payments of dividends or other distributions in cash or other securities that would constitute Disqualified Equity Interests, or (iv) is or becomes convertible into

or exchangeable for Indebtedness or any other Equity Interests that would constitute Disqualified Equity Interests, in each case, prior to the date that is one hundred and eighty (180) days after the Stated Maturity Date; *provided* that, if such Equity Interests are issued pursuant to any plan for the benefit of directors, officers, employees or consultants of such Person or by any such plan to such directors, officers, employees or consultants, such Equity Interests shall not constitute Disqualified Equity Interests solely because they may be required to be repurchased by such Person upon the death, disability, retirement or termination of employment or service of such director, officer, employee or consultant.

“*Dollars*” and “*\$*” means lawful money of the United States of America.

“*Domestic Subsidiary*” means any Subsidiary that is organized under the laws of the United States, any state thereof or the District of Columbia.

“*Economic Sanctions Laws*” means:

(a) the Executive Order, the *International Emergency Economic Powers Act* (50 U.S.C. §§ 1701 *et seq.*), the *Trading with the Enemy Act* (50 U.S.C. App. §§ 1 *et seq.*), any other law or regulation promulgated thereunder from time to time and administered by OFAC and any similar law enacted in the United States after the date of this Agreement; and

(b) any other similar applicable law now or hereafter enacted in any other applicable jurisdiction.

“*EEA Financial Institution*” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“*EEA Member Country*” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“*EEA Resolution Authority*” means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“*Environmental Law*” means any federal, state, provincial or local governmental law, rule, regulation, order, writ, judgment, injunction or decree relating to pollution or protection of the environment or the treatment, storage, disposal, release, threatened release or handling of hazardous materials, and all local laws and regulations related to environmental matters and any specific agreements entered into with any competent authorities which include commitments related to environmental matters.

“*Equity Interest*” means, with respect to any Person, any and all shares, interests, participations or other equivalents, including membership interests (however designated, whether voting or nonvoting), of equity of such Person, including, if such Person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, but excluding debt securities convertible or exchangeable into such equity.

“*ERISA*” means the United States Employee Retirement Income Security Act of 1974, as amended.

“*ERISA Affiliate*” means, collectively, any Obligor, Subsidiary thereof, and any Person under common control, or treated as a single employer, with any Obligor or Subsidiary thereof, within the meaning of Section 414(b), (c), (m) or (o) of the Code.

“*ERISA Event*” means (i) a reportable event as defined in Section 4043 of ERISA with respect to a Title IV Plan, excluding, however, such events as to which the PBGC by regulation has waived the requirement of Section 4043(a) of ERISA that it be notified within thirty (30) days of the occurrence of such event; (ii) the applicability of the requirements of Section 4043(b) of ERISA with respect to a contributing sponsor, as defined in Section 4001(a)(13) of ERISA, to any Title IV Plan where an event described in paragraph (9), (10), (11), (12) or (13) of Section 4043(c) of ERISA is reasonably expected to occur with respect to such plan within the following thirty (30) days; (iii) a withdrawal by any Obligor or any ERISA Affiliate thereof from a Title IV Plan or the termination of any Title IV Plan resulting in liability under Sections 4063 or 4064 of ERISA; (iv) the withdrawal of any Obligor or any ERISA Affiliate thereof in a complete or partial withdrawal (within the meaning of Section 4203 and 4205 of ERISA) from any Multiemployer Plan if there is any potential liability therefore, or the receipt by any Obligor or any ERISA Affiliate thereof of notice from any Multiemployer Plan that it is in reorganization or insolvency pursuant to Section 4241 or 4245 of ERISA; (v) the filing of a notice of intent to terminate, the treatment of a plan amendment as a termination under Section 4041 or 4041A of ERISA, or the commencement of proceedings by the PBGC to terminate a Title IV Plan or Multiemployer Plan; (vi) the imposition of liability on any Obligor or any ERISA Affiliate thereof pursuant to Sections 4062(e) or 4069 of ERISA or by reason of the application of Section 4212(c) of ERISA; (vii) the failure by any Obligor or any ERISA Affiliate thereof to make any required contribution to a Plan, or the failure to meet the minimum funding standard of Section 412 of the Code with respect to any Title IV Plan (whether or not waived in accordance with Section 412(c) of the Code) or the failure to make by its due date a required installment under Section 430 of the Code with respect to any Title IV Plan or the failure to make any required contribution to a Multiemployer Plan; (viii) the determination that any Title IV Plan is considered an at-risk plan or a plan in endangered to critical status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; (ix) an event or condition which might reasonably be expected to constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Title IV Plan or Multiemployer Plan; (x) the imposition of any liability under Title I or Title IV of ERISA, other than PBGC premiums due but not delinquent under Section 4007 of ERISA, upon any Obligor or any ERISA Affiliate thereof; (xi) an application for a funding waiver under Section 303 of ERISA or an extension of any amortization period pursuant to Section 412 of the Code with respect to any Title IV Plan; (xii) the

occurrence of a non-exempt prohibited transaction under Sections 406 or 407 of ERISA for which any Obligor or any Subsidiary thereof may be directly or indirectly liable; (xiii) a violation of the applicable requirements of Section 404 or 405 of ERISA or the exclusive benefit rule under Section 401(a) of the Code by any fiduciary or disqualified person for which any Obligor or any ERISA Affiliate thereof may be directly or indirectly liable; (xiv) the occurrence of an act or omission which could give rise to the imposition on any Obligor or any ERISA Affiliate thereof of fines, penalties, Taxes or related charges under Chapter 43 of the Code or under Sections 409, 502(c), (i) or (1) or 4071 of ERISA; (xv) the assertion of a material claim (other than routine claims for benefits) against any Plan or the assets thereof, or against any Obligor or any Subsidiary thereof in connection with any such plan; (xvi) receipt from the IRS of notice of the failure of any Qualified Plan to qualify under Section 401(a) of the Code, or the failure of any trust forming part of any Qualified Plan to fail to qualify for exemption from taxation under Section 501(a) of the Code; (xvii) the imposition of any lien (or the fulfillment of the conditions for the imposition of any lien) on any of the rights, properties or assets of any Obligor or any ERISA Affiliate thereof, in either case pursuant to Title I or IV, including Section 302(f) or 303(k) of ERISA or to Section 401(a)(29) or 430(k) of the Code; or (xviii) the establishment or amendment by any Obligor or any Subsidiary thereof of any “welfare plan,” as such term is defined in Section 3(1) of ERISA, that provides post-employment welfare benefits in a manner that would increase the liability of any Obligor, other than those benefits required under the Consolidated Omnibus Budget Reconciliation Act.

“*ERISA Funding Rules*” means the rules regarding minimum required contributions (including any installment payment thereof) to Title IV Plans, as set forth in Sections 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

“*EU Bail-In Legislation Schedule*” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“*Event of Default*” has the meaning set forth in Section 10.01.

“*Excess Funding Guarantor*” has the meaning set forth in Section 11.08.

“*Excess Payment*” has the meaning set forth in Section 11.08.

“*Exchange Act*” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“*Excluded Accounts*” means deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the employees of Borrower and its Subsidiaries.

“*Excluded Taxes*” means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes and branch profits Taxes in each case (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of a Lender, its applicable lending office located in, the

jurisdiction imposing such Tax or (ii) that are Other Connection Taxes, (b) any U.S. federal withholding Taxes that are imposed on amounts payable to Lender to the extent that the obligation to withhold amounts existed on the date that (i) Lender became a “Lender” under this Agreement or (ii) Lender changes its lending office, except in each case to the extent Lender is a direct or indirect assignee of any other Lender that was entitled, at the time the assignment of such other Lender became effective, to receive additional amounts under Section 5.03 or Lender was entitled to receive additional amounts under Section 5.03 immediately before it changed its lending office, (c) any Taxes imposed in connection with FATCA, and (d) Taxes attributable to such Recipient’s failure to comply with Section 5.03(e).

“*Executive Order*” means the US Executive Order No. 13224 on Blocking Property and Prohibiting Transactions with Persons who commit, Threaten to Commit, or Support Terrorism.

“*Expense Deposit*” means a cash deposit in the amount of \$50,000 made by Borrower to an Affiliate of Perceptive Advisors LLC pursuant to the Proposal Letter for the prepayment of the Lenders’ costs and expenses (payable pursuant to Section 13.03(a) and/or the Proposal Letter) incurred prior to the Closing Date.

“*FATCA*” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities entered into in connection with the implementation of the foregoing.

“*Foreign Lender*” means a Lender that is not a U.S. Person.

“*Foreign Subsidiary*” means any Subsidiary that is not a Domestic Subsidiary.

“*GAAP*” means generally accepted accounting principles in the United States of America, as in effect from time to time, set forth in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants, in the statements and pronouncements of the Financial Accounting Standards Board and in such other statements by such other entity as may be in general use by significant segments of the accounting profession that are applicable to the circumstances as of the date of determination. Subject to Section 1.02, all references to “GAAP” shall be to GAAP applied consistently with the principles used in the preparation of the financial statements described in Section 7.04(a).

“*Governmental Approval*” means any consent, authorization, approval, order, license, franchise, permit, certification, accreditation, registration, clearance, exemption, filing or notice that is issued or granted by or from (or pursuant to any act of) any Governmental Authority, including any application or submission related to any of the foregoing.

“*Governmental Authority*” means any nation, government, branch of power (whether executive, legislative or judicial), state, municipality or other political subdivision thereof and any

entity exercising executive, legislative, judicial, monetary, regulatory or administrative functions of or pertaining to government, including without limitation regulatory authorities, governmental departments, agencies, commissions, bureaus, officials, ministers, courts, bodies, boards, tribunals and dispute settlement panels, and other law-, rule- or regulation-making organizations or entities of any State, territory, county, city or other political subdivision of the United States.

“*Guarantee*” of or by any Person (the “*guarantor*”) means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the “*primary obligor*”) in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided*, that the term Guarantee shall not include endorsements for collection or deposit in the Ordinary Course of Business.

“*Guarantee Assumption Agreement*” means a Guarantee Assumption Agreement substantially in the form of Exhibit A by an entity that, pursuant to Section 8.11(a), is required to become a “Guarantor”.

“*Guaranteed Obligations*” has the meaning set forth in Section 11.01.

“*Guarantor*” means, collectively, each Subsidiary of Borrower on the Closing Date or joined as a Guarantor from time to time pursuant to Section 8.11(a).

“*Hazardous Material*” means any substance, element, chemical, compound, product, solid, gas, liquid, waste, by-product, pollutant, contaminant or material which is hazardous or toxic, and includes, without limitation, (a) asbestos, polychlorinated biphenyls and petroleum (including crude oil or any fraction thereof) and (b) any material classified or regulated as “hazardous” or “toxic” or words of like import pursuant to an Environmental Law.

“*Hedging Agreement*” means any interest rate exchange agreement, foreign currency exchange agreement, commodity price protection agreement or other interest or currency exchange rate or commodity price hedging arrangement.

“*Immaterial Foreign Subsidiary*” means, as of any date, any Foreign Subsidiary for which (a) the consolidated total assets of such Foreign Subsidiary and its Subsidiaries, when taken together with the consolidated total assets of all other Immaterial Foreign Subsidiaries their subsidiaries, is not in excess of 5.0% of the consolidated total assets of the Borrower and its Subsidiaries and (b) the aggregate amount of the Total Revenue of such Foreign Subsidiary and its subsidiaries on a consolidated basis, when taken together with the contribution to Total Revenue of all other Immaterial Foreign Subsidiaries and their Subsidiaries on a consolidated basis, is not

in excess of 5.0% of Total Revenue of the Borrower and its Subsidiaries, in each case as of the last day of any four quarter period; *provided* that notwithstanding the foregoing, at no time shall any Guarantor existing on the Closing Date or joined hereto pursuant to Section 8.11 subsequently be deemed an Immaterial Foreign Subsidiary.

“*Indebtedness*” of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes, loan agreements or similar instruments, (c) all obligations of such Person upon which interest charges are customarily paid, (d) all obligations of such Person under conditional sale or other title retention agreements relating to Property acquired by such Person, (e) all obligations of such Person in respect of the deferred purchase price of Property or services (excluding current accounts payable incurred in the Ordinary Course of Business not overdue by more than one hundred twenty (120) days), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on Property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (g) all Guarantees by such Person of Indebtedness of others, (h) all Capital Lease Obligations of such Person, (i) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit and letters of guaranty, (j) obligations under any Hedging Agreement, currency swaps, forwards, futures or derivatives transactions, (k) all obligations, contingent or otherwise, of such Person in respect of bankers’ acceptances, (l) all obligations of such Person under license or other agreements containing a guaranteed minimum payment or purchase by such Person, (m) any Disqualified Equity Interests of such Person, (n) any earnout obligation at the time such obligation is both required to be reflected as a liability on the balance sheet of such Person in accordance with GAAP and not paid after becoming due and payable and (o) all other obligations required to be classified as indebtedness of such Person under GAAP. The Indebtedness of any Person shall, without duplication, include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person’s ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor.

“*Indemnified Party*” has the meaning set forth in Section 13.03(b).

“*Indemnified Taxes*” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise described in clause (a), Other Taxes.

“*Ineligible Assignee*” means (a) a natural person or (b) the Obligors or any of their respective Affiliates.

“*Information*” has the meaning set forth in Section 13.17.

“*Insolvency Proceeding*” means (a) any case, action or proceeding before any court or other Governmental Authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or (b) any general assignment for the benefit of creditors, composition, marshaling of assets for creditors, or other, similar arrangement

in respect of any Person’s creditors generally or any substantial portion of such Person’s creditors, in each case undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code.

“*Intellectual Property*” means all Patents, Trademarks, Copyrights, industrial designs, Technical Information, whether registered or not, whether domestic or foreign, including all of the following:

- (a) applications, registrations, amendments and extensions relating to any Intellectual Property;
- (b) rights and privileges arising under any applicable Laws with respect to any Intellectual Property;
- (c) rights to sue for or collect any damages from any past, present or future infringements of any Intellectual Property; and
- (d) rights of the same or similar effect or nature as described above in any jurisdiction corresponding to any Intellectual Property throughout the world.

“*Interest Period*” means, (a) initially, the period beginning on (and including) the Closing Date and ending on (and including) the last day of the calendar month in which the Closing Date occurs, and (b) thereafter, the period beginning on (and including) the

first day of each succeeding calendar month and ending on the earlier of (and including) (x) the last day of such calendar month and (y) the Maturity Date.

“*Invention*” means any novel, inventive or useful art, apparatus, method, process, machine (including any article or Device), manufacture or composition of matter, or any novel, inventive and useful improvement in any art, method, process, machine (including any article or Device), manufacture or composition of matter.

“*Investment*” means, for any Person: (a) the acquisition (whether for cash, Property, services or securities or otherwise) of Equity Interests, bonds, notes, debentures, partnership or other ownership interests or other securities of any other Person or any agreement to make any such acquisition (including any “short sale” or any sale of any securities at a time when such securities are not owned by the Person entering into such sale); (b) the making of any deposit with, or advance, loan, assumption of debt or other extension of credit to, any other Person (including the purchase of Property from another Person subject to an understanding or agreement, contingent or otherwise, to resell such Property to such Person), but excluding any such advance, loan or extension of credit in the nature of an ordinary course trade receivable having a term not exceeding ninety (90) days arising in connection with the sale of services, inventory or supplies by such Person in the Ordinary Course of Business; (c) the entering into of any Guarantee of, or other contingent obligation with respect to, Indebtedness or other liability of any other Person and (without duplication) any amount committed to be advanced, lent or extended to such Person; (d) entering into any joint venture; or (e) the entering into of any Hedging Agreement. The amount of an Investment will be determined at the time the Investment is made without giving effect to any subsequent changes in value.

“*IRS*” means the U.S. Internal Revenue Service or any successor agency, and to the extent relevant, the U.S. Department of the Treasury.

“*Laws*” means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“*Lenders*” has the meaning set forth in the introduction hereto.

“*LIBOR*” means, for any Interest Period, the rate per annum (rounded upwards if necessary, to the next 1/100%) equal to the London interbank offered rate for one-month deposits in Dollars appearing on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 as of 11:00 a.m. (London time) two (2) Business Days prior to the commencement of any Interest Period; *provided*, that in the event that such rate does not appear on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 (or otherwise on the Dow Jones Markets screen) at such time, “*LIBOR*” shall be determined by reference to such other comparable publicly available service for displaying the offered rate for deposit in Dollars in the London interbank market as may be selected by the Administrative Agent; *provided, further*, that in no event shall LIBOR be less than 1.75%.

“*Lien*” means any mortgage, lien, pledge, charge or other security interest, or any lease, title retention agreement, mortgage, restriction, easement, right-of-way, option or adverse claim (of ownership or possession) or other encumbrance of any kind or character whatsoever or any preferential arrangement that has the practical effect of creating a security interest.

“*Loan Documents*” means, collectively, this Agreement, the Notes, the Security Documents, any Guarantee Assumption Agreement, the Warrant Certificate and any subordination agreement, intercreditor agreement or other present or future document, instrument, agreement or certificate delivered to any Lender in connection with this Agreement or any of the other Loan Documents, in each case, as amended, restated, supplemented or otherwise modified.

“*Loan Exposure*” means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Loans of such Lender; *provided*, at any time prior to the making of the Loans, the Loan Exposure of any Lender shall be equal to such Lender’s Commitment.

“*Loans*” means the Tranche A Loan and the Tranche B Loan.

“*Loss*” means judgments, debts, liabilities, expenses, costs, damages or losses, contingent or otherwise, whether liquidated or unliquidated, matured or unmatured, disputed or undisputed, contractual, legal or equitable, including loss of value, professional fees, including fees and

disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any Claim or any proceeding relating to any Claim.

“*Majority Lenders*” means, at any time, one or more Lenders having or holding Loan Exposure and representing more than 50% of the aggregate Loan Exposure of all Lenders.

“*Margin Stock*” means “margin stock” within the meaning of Regulations U and X.

“*Material Adverse Change*” and “*Material Adverse Effect*” mean a material adverse change in or effect on (a) the business, financial condition, operations and performance of the Obligors taken as a whole, (b) the ability of any Obligor to perform its obligations under any Loan Document, (c) the value of the Property comprising Collateral (taken as a whole), or (d) the legality, validity, binding effect or enforceability of the Loan Documents or the rights and remedies of any Lender under any of the Loan Documents.

“*Material Agreement*” means (a) any Contract which is listed in Schedule 7.14, (b) any other Contract to which any Obligor is a party or a beneficiary from time to time, or to which any assets or properties of any Obligor is bound, the loss or termination of which would reasonably be expected to result in a Material Adverse Effect, and (c) any other Contract to which any Obligor is a party or a guarantor (or equivalent) whether existing as of the date hereof or in the future that during any period of twelve (12) consecutive months is reasonably expected to (i) result in payments or receipts (including royalty, licensing or similar payments) made to any Obligor in an aggregate amount in excess of \$1,000,000 or (ii) require payments or expenditures (including royalty, licensing or similar payments) made by any Obligor in an aggregate amount in excess of \$1,000,000.

“*Material Indebtedness*” means, at any time, any Indebtedness of any Obligor, the outstanding principal amount of which, individually or in the aggregate, exceeds \$250,000.

“*Material Intellectual Property*” means all Obligor Intellectual Property, including those described in Schedule 7.05(b), whether currently owned or licensed, or acquired, developed or otherwise licensed or obtained after the date hereof (a) necessary for the operation of the business of any Obligor as currently conducted or as currently contemplated to be conducted, (b) the loss of which would reasonably be expected to have or result in a Material Adverse Effect or (c) that has a fair market value in excess of \$1,000,000.

“*Maturity Date*” means the earlier to occur of (a) the Stated Maturity Date, and (b) the date on which the Loans are accelerated pursuant to Section 10.02.

“*Mult employer Plan*” means any multiemployer plan, as defined in Section 4001(a)(3) of ERISA, to which any ERISA Affiliate incurs or otherwise has any obligation or liability, contingent or otherwise.

“*Net Cash Proceeds*” means,

(a) with respect to the incurrence or issuance of any Indebtedness incurred by an Obligor not permitted under Section 9.01, the excess, if any, of (i) the sum of the cash received in connection with such incurrence or issuance over (ii) the investment banking fees, underwriting discounts, commissions, costs and other reasonable expenses and other customary expenses (including reasonable attorney’s, accountant’s and other similar professional advisor’s fees), incurred by such Obligor in connection with such incurrence or issuance to third parties (other than any other Obligor or any of their respective Affiliates),

(b) with respect to any Casualty Event, the amount of cash proceeds actually received from time to time by or on behalf of an Obligor after deducting therefrom only (i) actual costs and expenses related thereto incurred by such Obligor in connection therewith and (ii) Taxes paid or payable in connection therewith, and

(c) with respect to any Asset Sale, the excess, if any, of (i) cash proceeds received in respect of such Asset Sale (including cash proceeds subsequently received (as and when received)) over (ii) the sum of (A) the direct costs of such Asset Sale then payable by the recipient of such proceeds excluding amounts payable to any Obligor, (B) sales and use taxes paid or payable by such recipient as a result thereof, (C) amounts required to be applied to repay principal, interest and prepayment premiums and penalties on Indebtedness secured by a Permitted Lien on the properties subject to such Asset Sale and (D) amounts reserved or deposited in escrow with respect to indemnity payments or price adjustments until such amounts are released to the Obligors.

“*Note*” means a promissory note executed and delivered by Borrower to any Lender in the form attached hereto as Exhibit C.

“*Obligations*” means, with respect to any Obligor, all amounts, obligations (including, without limitation, all Warrant Obligations), liabilities, covenants and duties of every type and description owing by such Obligor to any Lender or any other Indemnified Party hereunder, arising out of, under, or in connection with, any Loan Document, whether direct or indirect (regardless of whether acquired by assignment), absolute or contingent, due or to become due, whether liquidated or not, now existing or hereafter arising and however acquired, and whether or not evidenced by any instrument for the payment of money, including, without duplication, (a) all Loans, (b) all interest on the Loans (including interest at the Default Rate), whether or not accruing after the filing of any petition in bankruptcy or after the commencement of any insolvency, reorganization or similar proceeding, and whether or not a claim for post-filing or post-petition interest is allowed in any such proceeding, (c) any Prepayment Premium, and (d) all other fees, expenses (including fees, charges and disbursement of counsel), interest, commissions, charges, costs, disbursements, indemnities and reimbursement of amounts paid and other sums chargeable to such Obligor under any Loan Document.

“*Obligor Intellectual Property*” means Intellectual Property owned by or licensed to any of the Obligors.

“*Obligors*” means, collectively, Borrower, each Guarantor and each of their respective successors and permitted assigns.

“*OFAC*” means the Office of Foreign Assets Control of the U.S. Department of the Treasury (or any successor thereto).

“*Ordinary Course of Business*” means, with respect to the Obligors, the ordinary course of business generally consistent with past custom and practice (including with respect to nature, scope, magnitude, quantity and frequency).

“*Organizational Documents*” means (a) with respect to any corporation, its certificate or articles of incorporation or organization, as amended, and its by-laws, as amended, (b) with respect to any limited partnership, its certificate of limited partnership, as amended, and its partnership agreement, as amended, (c) with respect to any general partnership, its partnership agreement, as amended, and (d) with respect to any limited liability company, its articles of organization, as amended, and its operating agreement, as amended. In the event any term or condition of this Agreement or any other Loan Document requires any Organizational Document to be certified by a secretary of state or similar government official, the reference to any such “Organizational Document” shall only be to a document of a type customarily certified by such government official.

“*Other Connection Taxes*” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“*Other Taxes*” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 5.03(g)).

“*Participant*” has the meaning set forth in Section 13.05(e).

“*Participant Register*” has the meaning set forth in Section 13.05(f).

“*Patents*” has the meaning set forth in the Security Documents.

“*Payment Date*” means the last day of each Interest Period; *provided* that if such last day of such Interest Period is not a Business Day, then the Payment Date for such Interest Period will be the next succeeding Business Day.

“*PBGC*” means the United States Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

“*Perceptive*” has the meaning set forth in the introduction hereto.

“*Permits*” means all permits, licenses, registrations, certificates, orders, approvals, authorizations, consents, waivers, franchises, variances and similar rights issued by or obtained from any Governmental Authority or any other Person, including, without limitation, those relating to Environmental Laws.

“*Permitted Acquisition*” means any Acquisition by any Obligor or any of its wholly-owned Subsidiaries, by (a) purchase, merger, amalgamation, license or otherwise, of all or substantially all of the assets of, all of the Equity Interests of, or a business line or unit or a division of, any Person or (b) license arrangement for the rights to use, develop, market or otherwise commercialize any Patents, Trademarks, Copyrights or other Intellectual Property (other than ordinary course, over the counter software license arrangements); *provided* that:

(i) immediately prior to, and immediately after giving effect thereto, no Default shall have occurred and be continuing or would result therefrom;

(ii) all transactions in connection therewith shall be consummated, in all material respects, in accordance with all applicable Laws and in conformity in all material respects with all applicable Governmental Approvals;

(iii) in the case of the Acquisition of all of the Equity Interests of such Person, all of the Equity Interests (except for any such securities in the nature of directors’ qualifying shares required pursuant to applicable Law) acquired, or otherwise issued by such Person or any newly formed Subsidiary of such Obligor in connection with such Acquisition, shall be owned 100% by an Obligor or any other Subsidiary of Borrower, and Borrower shall have taken, or caused to be taken, as of the date such Person becomes a Subsidiary of an Obligor, each of the actions set forth in Section 8.11, if applicable;

(iv) such Person (in the case of an Acquisition of Equity Interests) or assets (in the case of an Acquisition of assets or a division) (i) shall be engaged or used, as the case may be, in the same business or lines of business in which Borrower and/or its Subsidiaries are engaged or a business reasonably and substantially related thereto or (ii) shall have a similar customer base as Borrower and/or its Subsidiaries;

(v) Borrower shall have provided the Administrative Agent with at least ten (10) Business Days’ prior written notice of any such Acquisition, together with summaries, prepared in reasonable detail, of all due diligence conducted by or on behalf of Borrower or the applicable Subsidiary prior to such Acquisition;

(vi) all of the assets or Equity Interests acquired in connection with such Acquisition shall be of a U.S. Person;

(vii) the Acquisition shall have been approved by the Board or other governing body or controlling Person of the Person acquired or the Person from whom such assets or division is acquired; and

(viii) on a *pro forma* basis after giving effect to such Acquisition, Borrower and its Subsidiaries shall be in compliance with Section 8.15.

“*Permitted Cash Equivalent Investments*” means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than two (2) years from the date of acquisition, (b) commercial paper with an average maturity of no more than one (1) year and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc., (c) any money market funds or other investment vehicles whose principal investments are in investments described in clauses (a) or (b) above, and (d) certificates of deposit maturing no more than one (1) year after issue.

“*Permitted Indebtedness*” means any Indebtedness permitted under Section 9.01.

“*Permitted Licenses*” means (a) licenses of over-the-counter software that is commercially available to the public and (b) licenses for the use of Obligor Intellectual Property, in each case, entered into in the Ordinary Course of Business or as otherwise may be approved by the applicable Obligor’s Board and so long as (i) no Event of Default has occurred and is continuing at the time such license is entered into and (ii) such license does not materially impair the Lenders from exercising their rights under any of the Loan Documents.

“*Permitted Liens*” means any Liens permitted under Section 9.02.

“*Permitted Priority Liens*” means (a) Liens permitted under Section 9.02(d), (e), (f) or (g) and (b) Liens permitted under Section 9.02(b); *provided* that such Liens are also of the type described in Section 9.02(d), (e), (f) or (g).

“*Permitted Refinancing*” means, with respect to any Indebtedness permitted to be refinanced, extended, renewed or replaced hereunder, any refinancings, extensions, renewals and replacements of such Indebtedness; *provided* that such refinancing, extension, renewal or replacement shall not (a) increase the outstanding principal amount of the Indebtedness being refinanced, extended, renewed or replaced, (b) contain terms relating to outstanding principal amount, amortization, interest rate or equivalent yield, maturity, collateral security (if any) or subordination (if any), or other material terms that, taken as a whole, are less favorable in any material respect to any Obligor or the Lenders than the terms of any agreement or instrument governing the Indebtedness being refinanced, (c) contain any new requirement to grant any Lien or to give any Guarantee that was not an existing requirement of the Indebtedness being refinanced and (d) after giving effect to such refinancing, extension, renewal or replacement, no Default shall have occurred (or could reasonably be expected to occur) as a result thereof.

“*Person*” means any individual, corporation, company, voluntary association, partnership, limited liability company, joint venture, trust, unincorporated organization or Governmental Authority or other entity of whatever nature.

“*PFIC*” has the meaning set forth in Section 8.01(j).

“*Plan*” means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an “employer” as defined in Section 3(5) of ERISA.

“*Prepayment Premium*” has the meaning set forth in Section 3.03(a)(i).

“*Pro Rata Share*” has the meaning set forth in Section 11.08.

“*Prohibited Payment*” means any bribe, rebate, payoff, influence payment, kickback or other payment or gift of money or anything of value (including meals or entertainment) to any officer, employee or ceremonial office holder of any government or instrumentality thereof, political party or supra-national organization (such as the United Nations), any political candidate, any royal family member or any other person who is connected or associated personally with any of the foregoing that is prohibited under any Requirement of Law.

“*Projections*” has the meaning set forth in Section 7.04(b).

“*Property*” of any Person means any property or assets, or interest therein, of such Person.

“*Proportionate Share*” means, with respect to any Lender, the percentage obtained by dividing (a) the Loan Exposure of such Lender then in effect by (b) the aggregate Loan Exposure of all Lenders then in effect.

“*Proposal Letter*” means the letter agreement, dated November 27, 2020, among Borrower and Perceptive Advisors LLC, regarding the transactions contemplated hereby and the outline of proposed terms and conditions attached thereto.

“*Publicly Reporting Company*” means an issuer generally subject to the public reporting requirements of the Exchange Act.

“*Qualified Equity Interest*” means, with respect to any Person, any Equity Interest of such Person that is not a Disqualified Equity Interest.

“*Qualified Plan*” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (i) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was ever obligated to make, contributions, and (ii) that is intended to be tax qualified under Section 401(a) of the Code.

“*Qualified Public Offering*” means the initial firm-commitment underwritten public offering of common Equity Interests of the Borrower pursuant to an effective registration statement filed with the SEC in accordance with the Securities Act of 1933, raising net cash proceeds of at least \$50,000,000, and in connection with such offering the common Equity Interests of the Borrower is listed for trading on the Nasdaq Stock Market’s National Market, the New York Stock

Exchange, or another exchange or marketplace acceptable to the Administrative Agent in its sole discretion.

“*Recipient*” means any Lender or the Administrative Agent.

“*Redemption Date*” has the meaning set forth in Section 3.03(a).

“*Redemption Price*” has the meaning set forth in Section 3.03(a).

“*Register*” has the meaning set forth in Section 13.05(d).

“*Regulation T*” means Regulation T of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation U*” means Regulation U of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation X*” means Regulation X of the Board of Governors of the Federal Reserve System, as amended.

“*Representatives*” has the meaning set forth in Section 13.17.

“*Requirement of Law*” means, as to any Person, any Law applicable to or binding upon such Person or any of its Properties or revenues.

“*Resignation Effective Date*” has the meaning set forth in Section 12.06(a).

“*Responsible Officer*” of any Person means each of the president, chief executive officer and chief financial officer of such Person.

“*Restricted Payment*” means any dividend or other distribution (whether in cash, securities or other Property) with respect to any Equity Interest of Borrower or any of its Subsidiaries, or any payment (whether in cash, securities or other Property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such shares of capital stock of Borrower or any of its Subsidiaries or any option, warrant or other right to acquire any such shares of capital stock of Borrower or any of its Subsidiaries.

“*Restrictive Agreement*” means any indenture, agreement, instrument or other binding arrangement that prohibits, restricts or imposes any condition upon (a) the ability of any Obligor to create, incur or permit to exist any Lien upon any of its Property (other than (i) customary provisions in contracts (including without limitation leases and in-bound licenses of Intellectual Property) restricting the assignment thereof, (ii) restrictions or conditions imposed by any agreement governing secured Permitted Indebtedness permitted under Section 9.01(g), to the extent that such restrictions or conditions apply only to the Property securing such Indebtedness and (iii) software and other Intellectual Property licenses pursuant to which an Obligor is the

licensee of the relevant software or Intellectual Property, as the case may be (in which case, any prohibition or limitation shall relate only to the assets or rights subject to the applicable license and/or the license itself)), or (b) the ability of any Obligor to pay dividends or other distributions with respect to any shares of its Equity Interests or to make or repay loans or advances to any Obligor or to Guarantee Indebtedness of any Obligor.

“*Resolution Authority*” means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

“*Sanctions*” means economic or financial sanctions, requirements or trade embargoes imposed, administered or enforced from time to time by Governmental Authorities (including, but not limited to, OFAC, the U.S. Department of State and the U.S. Department of Commerce).

“*Sanctions Laws*” means all laws, rules, regulations and requirements of any jurisdiction applicable to the Obligors or any party to the Loan Documents concerning or relating to Sanctions, terrorism or money laundering.

“*SEC*” means United States Securities and Exchange Commission.

“*Securities Account*” has the meaning set forth in the Security Agreement.

“*Security Agreement*” means the Security Agreement, dated as of the date hereof, in substantially the form of Exhibit G, among the Obligors, the Lenders and the Administrative Agent, granting a security interest in the personal Property constituting Collateral thereunder in favor of the Administrative Agent for the benefit of the Lenders.

“*Security Documents*” means, collectively, the Security Agreement, each Short-Form IP Security Agreement, and each other security document, control agreement or financing statement executed to perfect Liens in favor of the Administrative Agent for the benefit of the Lenders.

“*Short-Form IP Security Agreements*” means short-form copyright, patent or trademark (as the case may be) security agreements, dated as of the date hereof, in substantially the form of Exhibits H-1 and H-2, entered into by one or more Obligors in favor of the Administrative Agent for the benefit of the Lenders, each in form and substance satisfactory to the Administrative Agent.

“*Solvent*” means, with respect to any Person at any time, that (a) the present fair saleable value of the Property of such Person is greater than the total amount of liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the Property of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, and (c) such Person has not incurred and does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person’s ability to pay as such debts and liabilities mature.

“*Stated Maturity Date*” means the fifth (5th) anniversary of the Closing Date; *provided* that if such date shall occur on a day that is not a Business Day, then the Stated Maturity Date shall be the immediately succeeding Business Day.

“*Subsidiary*” means, with respect to any Person (the “*parent*”) at any time of determination, any other Person of which more than 50% of the outstanding capital stock of such other Person having ordinary voting powers, determined on a fully diluted basis, is at the time directly or indirectly owned or controlled by the parent. Unless the context otherwise specifically requires, the term “*Subsidiary*” shall be a reference to a Subsidiary of Borrower.

“*Taxes*” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“*Technical Information*” means all trade secrets and other proprietary or confidential information, which may include any information of a scientific, technical, or business nature in any form or medium, standards and specifications, conceptions, ideas, innovations, discoveries, invention disclosures, all documented research, developmental, demonstration or engineering work, data, plans, specifications, reports, summaries, experimental data, manuals, models, samples, know-how, technical information, systems, methodologies, computer programs or information technology.

“*Title IV Plan*” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (a) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was obligated to make, contributions, and (b) that is or was subject to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA.

“*Total Revenue*” means, with respect to the Obligors, all amounts paid to and received by such Person in the ordinary course of business that, in accordance with GAAP, would be classified as net revenue.

“*Trademarks*” has the meaning set forth in the Security Documents.

“*Tranche A Loan*” means each loan advanced by a Lender pursuant to Section 2.01(a). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche A Loan on any date of determination shall mean the aggregate principal amount of the Tranche A Loan made pursuant to Section 2.01(a) that has not yet been repaid as of such date.

“*Tranche A Loan Commitment*” means the commitment of a Lender to make or otherwise fund a Tranche A Loan and “*Tranche A Loan Commitments*” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche A Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche A Loan Commitments as of the Closing Date is \$25,000,000.

“*Tranche B Loan*” means each loan advanced by a Lender pursuant to Section 2.01(b). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche B Loan on any date of determination shall mean the aggregate principal amount of the Tranche B Loan made pursuant to Section 2.01(b) that has not yet been repaid as of such date.

“*Tranche B Loan Borrowing Date*” means with respect to the Tranche B Loan, the Business Day on which all conditions set forth in Section 6.02 have been satisfied or waived by the Lenders and the Tranche B Loan is made hereunder.

“*Tranche B Loan Commitment*” means the commitment of a Lender to make or otherwise fund a Tranche B Loan and “*Tranche B Loan Commitments*” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche B Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche B Loan Commitments as of the Closing Date is \$25,000,000.

“*Tranche B Loan Commitment Termination Date*” means March 31, 2022.

“*Transactions*” means the execution, delivery and performance by each Obligor of this Agreement and the other Loan Documents to which such Obligor is a party and the other transactions contemplated hereby and thereby, including disbursement and application of the proceeds of the Loans.

“*UK Financial Institution*” means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

“*UK Resolution Authority*” means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

“*Unrestricted Cash*” means the balance of unencumbered cash (other than cash encumbered by the Liens granted to the Lenders pursuant to the Loan Documents) and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in a Controlled Account.

“*U.S. Person*” means a “United States person” within the meaning of Section 7701(a)(30) of the Code.

“*U.S. Tax Compliance Certificate*” has the meaning set forth in Section 5.03(f)(ii)(B)(3).

“*Warrant Certificate*” means the warrant to be delivered to the Administrative Agent pursuant to Section 6.01(i) that, among other things, grants the holder thereof the right to purchase the number of shares of Series D Preferred Stock of Borrower as indicated on the Warrant Shares table on Schedule 1, as the Warrant Certificate may be amended, replaced or otherwise modified pursuant to the terms thereof.

“*Warrant Obligations*” means, with respect to Borrower, all of its Obligations arising out of, under or in connection with, any Warrant Certificate.

“*Withdrawal Liability*” means, at any time, any liability incurred (whether or not assessed) by any ERISA Affiliate and not yet satisfied or paid in full at such time with respect to any Multiemployer Plan pursuant to Section 4201 of ERISA.

“Write-Down and Conversion Powers” means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

Section 1.02. Accounting Terms and Principles. All accounting determinations required to be made pursuant hereto shall, unless expressly otherwise provided herein, be made substantially in accordance with GAAP. If, after the date hereof, any change occurs in GAAP or in the application thereof (an “Accounting Change”) and such change would cause any amount required to be determined for the purposes of the covenants to be maintained or calculated pursuant to Article 8 or 9 to be materially different than the amount that would be determined prior to such change, then Borrower will provide a detailed notice of such change (an “Accounting Change Notice”) to the Administrative Agent in conjunction with the next required delivery of financial statements pursuant to Section 8.01. If Borrower requests an amendment to any provision hereof to eliminate the effect of any Accounting Change occurring after the Closing Date or in the application thereof on the operation of such provision, regardless of whether any Accounting Change Notice is given before or after such Accounting Change or in the application thereof, then the Administrative Agent and Borrower agree that they will negotiate in good faith amendments to the provisions of this Agreement that are directly affected by such Accounting Change with the intent of having the respective positions of the Administrative Agent and Borrower after such Accounting Change conform as nearly as possible to their respective positions as of the date of this Agreement and, until any such amendments have been agreed upon, (a) the provisions in this Agreement shall be calculated as if no such Accounting Change had occurred and (b) Borrower shall provide to the Administrative Agent a written reconciliation in form and substance reasonably satisfactory to the Administrative Agent, between calculations of any baskets and other requirements hereunder before and after giving effect to such Accounting Change.

All components of financial calculations made to determine compliance with this Agreement shall be adjusted to include or exclude, as the case may be, without duplication, such components of such calculations attributable to any Acquisition or disposition of assets consummated after the first day of the applicable period of determination and prior to the end of such period, as determined in good faith by Borrower based on assumptions expressed therein and that were reasonable based on the information available to Borrower at the time of preparation of the Compliance Certificate setting forth such calculations.

Section 1.03. Interpretation. For all purposes of this Agreement, except as otherwise expressly provided herein or unless the context otherwise requires, (a) the terms defined in this Agreement include the plural as well as the singular and vice versa; (b) words importing gender include all genders; (c) any reference to a Section, Article, Annex, Schedule or Exhibit refers to a Section or Article of, or Annex, Schedule or Exhibit to, this Agreement; (d) any reference to “this Agreement” refers to this Agreement, including all Annexes, Schedules and Exhibits hereto, and the words herein, hereof, hereto and hereunder and words of similar import refer to this Agreement and its Annexes, Schedules and Exhibits as a whole and not to any particular Section, Article, Annex, Schedule, Exhibit or any other subdivision; (e) references to days, months and years refer to calendar days, months and years, respectively; (f) all references herein to “include” or “including” shall be deemed to be followed by the words “without limitation”; (g) the word “from” when used in connection with a period of time means “from and including” and the word “until” means “to but not including”; and (h) accounting terms not specifically defined herein shall be construed substantially in accordance with GAAP (except for the term “property,” which shall be interpreted as broadly as possible, including, in any case, cash, securities, other assets, rights under contractual obligations and permits and any right or interest in any property, except where otherwise noted). Unless otherwise expressly provided herein, references to organizational documents, agreements (including the Loan Documents) and other contractual instruments shall be deemed to include all subsequent amendments, restatements, extensions, supplements and other modifications thereto permitted by the Loan Documents.

Section 1.04. Divisions. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction’s laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

ARTICLE 2

THE COMMITMENTS

Section 2.01. Loans.

(a) *Tranche A Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche A Loan to Borrower on the Closing Date in Dollars in a principal amount equal to such Lender’s Tranche A Loan Commitment. No Lender shall have an obligation to make a Tranche A Loan in excess of such Lender’s Tranche A Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.01), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least one (1) Business Day in advance of the Closing Date.

(iii) Borrower may make one borrowing under the Tranche A Loan Commitment which shall be on the Closing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche A Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche A Loan Commitment shall terminate immediately and without further action on the Closing Date after giving effect to the funding of such Lender's Tranche A Loan Commitment on such date.

(b) *Tranche B Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche B Loan to Borrower on the Tranche B Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche B Loan Commitment. No Lender shall have an obligation to make a Tranche B Loan in excess of such Lender's Tranche B Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.02), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche B Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche B Loan Commitment which shall be on the Tranche B Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche B Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche B Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche B Loan Borrowing Date after giving effect to the funding of such Lender's Tranche B Loan Commitment on such date and (y) the Tranche B Loan Commitment Termination Date.

(c) Any principal amount of any Loans borrowed under Section 2.01(a) or 2.01(b) hereof and subsequently repaid or prepaid may not be reborrowed.

Section 2.02. Proportionate Shares. All Loans shall be made, and all participations purchased, by the Lenders simultaneously and proportionately to their respective Proportionate Shares, it being understood that no Lender shall be responsible for any default by any other Lender in such other Lender's obligation to make a Loan hereunder or purchase a participation required hereby nor shall the Commitment of any Lender be increased or decreased as a result of a default by any other Lender in such other Lender's obligation to make a Loan requested hereunder or purchase a participation required hereby.

Section 2.03. Fees. On the Closing Date, Borrower shall pay to the Administrative Agent (out of the proceeds of the Tranche A Loan advanced by such Lenders on the Closing Date) for distribution to each Lender in accordance with its pro rata share of Loans, a non-refundable fee (the "Closing Fee") in the amount of \$750,000. Payment of the Closing Fee shall be in addition to such fees, costs and expenses due and payable pursuant to Section 12.03.

Section 2.04. Notes. Upon the request of any Lender, Borrower shall prepare, execute and deliver to such Lender one or more Notes evidencing the Loans payable to such Lender (or if requested by it, to it and its registered assigns).

Section 2.05. Use of Proceeds. Borrower shall use the proceeds of the Loans (a) for general working capital purposes and corporate purposes, (b) to refinance certain existing Indebtedness on the Closing Date and (c) to pay, in accordance with the funds flow attached to the Borrowing Notice, fees, costs and expenses incurred in connection with the Transactions.

ARTICLE 3

PAYMENTS OF PRINCIPAL AND INTEREST

Section 3.01. Repayment. There will be no scheduled repayments of principal on the Loans prior to the Maturity Date. The entire outstanding principal amount of the Loans, together with all accrued and unpaid interest thereon, will be due and payable on the Maturity Date.

Section 3.02. Interest.

(a) *Interest Generally.* Borrower agrees to pay to the Lenders interest in cash on the outstanding principal amount of the Loans for each Interest Period at a rate per annum equal to the sum of (i) LIBOR plus (ii) the Applicable Margin.

(b) *LIBOR Not Determinable.* If on or before the day on which LIBOR is to be determined, the Majority Lenders reasonably determine that (i) LIBOR cannot be determined for any reason, (ii) LIBOR will not adequately and fairly reflect the cost of maintaining the Loans or (iii) Dollar deposits in the principal amount of the Loans are not available in the London interbank market, the Majority Lenders shall, as soon as practicable thereafter, give written notice of such determination to Borrower and the Administrative Agent. Upon any such determination, LIBOR shall be LIBOR as of the end of the immediately preceding Interest Period and shall at all times thereafter bear interest at LIBOR as of the end of the immediately preceding Interest Period. Each determination by the Majority Lenders hereunder shall be conclusive and binding absent manifest error.

(c) *Replacement to LIBOR.* If at any time the Administrative Agent reasonably determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (b)(i) of this Section have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (b)(i) of this Section have not arisen but the supervisor for the administrator of LIBOR has made a public statement identifying a specific date after which LIBOR shall no longer be used for determining interest rates for loans,

then the Administrative Agent and Borrower shall endeavor to establish an alternate rate of interest to LIBOR that gives due consideration to the then-prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes

to this Agreement as may be applicable; *provided* that, if such alternate rate of interest shall be less than 1.75%, such rate shall be deemed to be 1.75% for the purposes of this Agreement. Notwithstanding anything to the contrary in Section 13.04, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five (5) Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Majority Lenders stating that such Lenders object to such amendment.

(d) *Default Interest.* Notwithstanding the foregoing, upon the occurrence and during the continuance of any Event of Default, the Applicable Margin shall increase automatically by 4.00% per annum (the interest rate, as increased pursuant to this Section 3.02(d), being the “*Default Rate*”). Notwithstanding any other provision herein, if interest is required to be paid at the Default Rate, it shall also be paid entirely in cash. If any Obligation is not paid when due under any applicable Loan Document, the amount thereof shall accrue interest at the Default Rate. Payment or acceptance of the increased rates of interest provided for in this Section 3.02(d) is not a permitted alternative to timely payment and shall not constitute a waiver of any Default or otherwise prejudice or limit any rights or remedies of the Administrative Agent or any Lender.

(e) *Payment Dates.* Accrued interest on the Loans shall be payable in arrears on each Payment Date with respect to the most recently completed Interest Period in cash, and upon the payment or prepayment of the Loans (on the principal amount being so paid or prepaid); *provided* that interest payable at the Default Rate shall be payable from time to time on demand by the Majority Lenders.

(f) *Maximum Rate.* Notwithstanding any other provision of this Agreement, in no event will any interest or rates referred to herein exceed the maximum interest rate permitted by applicable Law. If such maximum interest rate would be exceeded by the terms hereof, the rates of interest payable hereunder will be reduced to the extent necessary so that such rates (together with any fees or other amounts which are construed by a court of competent jurisdiction to be interest or in the nature of interest) equal the maximum interest rate permitted by applicable Law and any overpayment of interest received by the Lenders before such rates are so construed will be applied, forthwith after determination of such overpayment, to pay all then outstanding interest, and thereafter to pay outstanding principal.

Section 3.03. Prepayments.

(a) *Optional Prepayments.* (i) Borrower shall have the right to optionally prepay in whole or in part (in a minimum amount of \$500,000 and integral multiples of \$100,000 in excess of that amount for each partial prepayment, or, if less, the entire outstanding principal amount of the Loans) the outstanding principal amount of the Loans on any Business Day (a “*Redemption Date*”) for an amount equal to the sum of (x) the aggregate principal amount of the Loans being prepaid, (y) the prepayment premium set forth in clause (ii) below (the “*Prepayment Premium*”)

and (z) any accrued but unpaid interest in respect of the aggregate principal amount of the Loans being prepaid (such aggregate amount, the “*Redemption Price*”). The applicable Prepayment Premium shall be an amount calculated pursuant to Section 3.03(a)(ii).

(ii) If the Redemption Date occurs:

(A) on or prior to the first anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to seven percent (7%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(B) after the first anniversary of the Closing Date and on or prior to the second anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to six percent (6%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(C) after the second anniversary of the Closing Date and on or prior to the third anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to four percent (4%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(D) after the third anniversary of the Closing Date and on or prior to the fourth anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to three percent (3%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date; and

(E) after the fourth anniversary of the Closing Date and prior to the Stated Maturity Date, the Prepayment Premium shall be an amount equal to two percent (2%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date.

No Prepayment Premium shall be due with respect to repayment of the Loans on the Stated Maturity Date.

(iii) Payment of any Prepayment Premium under this Section 3.03 constitutes liquidated damages, not unmaturing interest or a penalty, as the actual amount of damages to the Lenders as a result of the relevant triggering event, prepayment or repayment would be impracticable and extremely difficult to ascertain. Accordingly, any Prepayment Premium hereunder is provided by mutual agreement of the Obligors and the Lenders as a reasonable estimation and calculation of such actual lost profits and other actual damages of the Lenders. Without limiting the generality of the foregoing, it is understood and agreed that upon the occurrence of any prepayment event, any Prepayment Premium shall be automatically and immediately due and payable as though any prepaid or repaid portion of the Loans were voluntarily prepaid as of such date and shall constitute part of the Obligations secured by the Collateral. Any Prepayment Premium shall also be

automatically and immediately due and payable if the Loans are satisfied or released by foreclosure (whether by power of judicial proceeding or otherwise), deed in lieu of foreclosure or by any other means. EACH OBLIGOR HEREBY

EXPRESSLY WAIVES (TO THE FULLEST EXTENT IT MAY LAWFULLY DO SO) THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE OR OTHER LAW THAT PROHIBITS OR MAY PROHIBIT THE COLLECTION OF THE FOREGOING PREPAYMENT PREMIUM IN CONNECTION WITH ANY SUCH EVENTS. Borrower and the other Obligors expressly agree (to the fullest extent it and they may lawfully do so) that with respect to any Prepayment Premium payable under the terms of this Agreement: (A) such Prepayment Premium is reasonable and is the product of an arm's length transaction between sophisticated business parties, ably represented by counsel; (B) such Prepayment Premium shall be payable notwithstanding the then-prevailing market rates at the time payment is made; (C) there has been a course of conduct between the Lenders and the Obligors giving specific consideration in this transaction for such agreement to pay such Prepayment Premium; and (D) the Obligors shall be estopped hereafter from claiming differently than as agreed to in this paragraph. The Obligors expressly acknowledge that their agreement to pay such Prepayment Premium as herein described is a material inducement to the Lenders to provide the Commitments and to make the Loans.

(b) *Mandatory Prepayments.* Borrower shall prepay the Loans in amounts as provided below, plus the Prepayment Premium on the principal amount of the Loans being prepaid (calculated in accordance with Section 3.03(a)(ii), it being agreed that the relevant payment date shall be deemed to be the "Redemption Date" for purposes of such calculation), plus any accrued but unpaid interest and fees then due and owing, as follows:

(i) In the event of any Casualty Event, an amount equal to 100% of the Net Cash Proceeds received by any Obligor with respect thereto; *provided, however,* so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may apply the Net Cash Proceeds of any casualty policy up to \$1,000,000 with respect to any loss, but not exceeding \$2,000,000 in the aggregate for all losses under all casualty policies during the term of this Agreement, toward the replacement or repair of destroyed or damaged property; *provided, further,* that any such replaced or repaired property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents.

(ii) In the event any Obligor incurs Indebtedness other than Indebtedness that is permitted by Section 9.01 hereof, 100% of the Net Cash Proceeds thereof received by such Obligor. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(ii) shall not be deemed to be a consent to any such incurrence of Indebtedness or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

(iii) In the event any Obligor consummates an Asset Sale other than an Asset Sale that is permitted by Section 9.09 hereof (other than Section 9.09(i)), 100% of the Net

Cash Proceeds received by such Obligor in connection with such Asset Sale; *provided, however,* so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may use such Net Cash Proceeds not exceeding \$500,000 in the aggregate for all Asset Sales during the term of this Agreement, to purchase, replace, repair or restore properties or assets used in the Obligors' businesses; *provided, further,* that any such purchased, replaced, repaired or restored property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(iii) shall not be deemed to be a consent to any Asset Sale or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

ARTICLE 4

PAYMENTS

Section 4.01. Payments.

(a) *Payments Generally.* Each payment of principal, interest and other amounts to be made by the Obligors under this Agreement or any other Loan Document shall be made in Dollars, in immediately available funds, without deduction, set off or counterclaim, to the deposit account of the Administrative Agent specified to Borrower from time to time, not later than 2:00 p.m. (Eastern time) on the date on which such payment shall become due (each such payment made after such time on such due date to be deemed to have been made on the next succeeding Business Day).

(b) *Application of Payments.* Each payment under this Agreement or any other Loan Document shall be applied in the following order of priority, with proceeds being applied to a succeeding level of priority only if amounts owing pursuant to the immediately preceding level of priority have been paid in full in cash:

(i) *first*, to the payment of any unpaid costs and expenses referred to in Section 13.03(a) then due and owing;

(ii) *second*, in reduction of Borrower's obligation to pay any unpaid interest and any fees then due and owing including, without limitation, (x) interest payable pursuant to Section 3.02(d) and (y) any Prepayment Premium, if applicable;

(iii) *third*, in reduction of Borrower's obligation to pay any Claims or Losses referred to in Section 13.03(b) then due and owing;

(iv) *fourth*, to the payment of unpaid principal of the Loans on a pro rata basis;

(v) *fifth*, in reduction of any other Obligation then due and owing; and

(vi) *sixth*, to Borrower or such other Persons as may lawfully be entitled to or directed by Borrower to receive the remainder.

Unless otherwise directed by the Majority Lenders, all payments of principal, interest and fees under this Agreement and the other Loan Documents shall be made by the Obligor to the Lenders pro rata in accordance with the Lenders' respective Proportionate Shares of such payments.

(c) *Non-Business Days*. If the due date of any payment under this Agreement (whether in respect of principal, interest, fees, costs or otherwise) would otherwise fall on a day that is not a Business Day, such date shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension.

Section 4.02. Computations. All computations of interest and fees hereunder shall be computed on the basis of a year of 360 days and actual days elapsed during the period for which payable.

Section 4.03. Notices. Each notice of optional prepayment shall be effective only if received by the Lenders not later than 2:00 p.m. (Eastern time) on the date three (3) Business Days prior to the date of prepayment. Each notice of optional prepayment shall specify the amount to be prepaid and the date of prepayment.

Section 4.04. Set-Off.

(a) *Set-Off Generally*. Upon the occurrence and during the continuance of any Event of Default, the Administrative Agent, the Lenders and each of their respective Affiliates are hereby authorized at any time and from time to time, to the fullest extent permitted by Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time owing by the Lenders or such Affiliates to or for the credit or the account of any Obligor against any and all of the Obligations, whether or not the Lenders shall have made any demand and although such Obligations may be unmaturing. Any Person exercising rights of set-off hereunder agrees to promptly notify Borrower after any such set-off and application, *provided* that the failure to give such notice shall not affect the validity of such set-off and application. The rights of the Lenders and their respective Affiliates under this Section 4.04 are in addition to other rights and remedies (including other rights of set-off) that the Lenders and their respective Affiliates may have.

(b) *Exercise of Rights Not Required*. Nothing contained herein shall require the Administrative Agent, the Lenders or any of their respective Affiliates to exercise any such right or shall affect the right of such Persons to exercise, and retain the benefits of exercising, any such right with respect to any other indebtedness or obligation of any Obligor.

ARTICLE 5

YIELD PROTECTION

Section 5.01. Additional Costs.

(a) *Change in Requirements of Law Generally*. If, on or after the date hereof, the adoption of any Requirement of Law, or any change in any Requirement of Law, or any change in the interpretation or administration thereof by any court or other Governmental Authority charged with the interpretation or administration thereof, or compliance by any Lender (or its lending office) with any request or directive (whether or not having the force of law) of any such Governmental Authority, shall impose, modify or deem applicable any reserve (including any such requirement imposed by the Board of Governors of the Federal Reserve System), special deposit, contribution, insurance assessment or similar requirement, in each case that becomes effective after the date hereof, against assets of, deposits with or for the account of, or credit extended by, a Lender (or its lending office) or shall impose on a Lender (or its lending office) any other condition affecting the Loans or the Commitment, not as a result of any action or inaction on the part of such Lender, and the result of any of the foregoing is to increase the cost to any Lender of making or maintaining its portion of the Loans, or to reduce the amount of any sum received or receivable by any Lender under this Agreement or any other Loan Document, by an amount reasonably deemed by such Lender in good faith to be material (other than (i) Indemnified Taxes, (ii) Taxes described in clauses (b) through (d) of the definition of "*Excluded Taxes*" and (iii) Connection Income Taxes), then Borrower shall, without duplication, pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender for such increased cost or reduction. Notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to constitute a change in Requirements of Law for all purposes of this Section 5.01, regardless of the date enacted, adopted or issued.

(b) *Change in Capital Requirements*. If a Lender shall have determined that, on or after the date hereof, the adoption of any Requirement of Law regarding capital adequacy, or any change therein, or any change in the interpretation or administration thereof by any Governmental Authority charged with the interpretation or administration thereof, or any request or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, in each case that becomes effective after the date hereof, has or would have the effect of reducing the rate of return on capital of a Lender (or its parent) as a consequence of a Lender's obligations hereunder or the Loans to a level below that which a Lender (or its parent) could have achieved but for such adoption, change, request or directive by an amount reasonably deemed by it to be material, then Borrower shall pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender (or its parent) for such reduction.

(c) *Notification by Lender*. The Lenders will promptly notify Borrower of any event of which it has knowledge, occurring after the date hereof, which will entitle a Lender to

compensation pursuant to this Section 5.01. Before giving any such notice pursuant to this Section 5.01(c) such Lender shall designate a different lending office if such designation (x) will, in the reasonable judgment of such Lender, avoid the need for, or reduce the amount of, such compensation and (y) will not, in the reasonable judgment of such Lender, be materially disadvantageous to such Lender. A certificate of the Lender claiming compensation under this Section 5.01, setting forth the amount or amounts to be paid to it hereunder, shall be conclusive and binding on Borrower in the absence of manifest error.

Section 5.02. Illegality. Notwithstanding any other provision of this Agreement, in the event that on or after the date hereof the adoption of or any change in any Requirement of Law or in the interpretation or application thereof by any competent Governmental Authority shall make it unlawful for a Lender or its lending office to make or maintain the Loans (and, in the opinion of such Lender, the designation of a different lending office would either not avoid such unlawfulness or would be disadvantageous to such Lender), then such Lender shall promptly notify Borrower thereof following which (a) the Lender's Commitment shall be suspended until such time as such Lender may again make and maintain the Loans hereunder and (b) if such Requirement of Law shall so mandate, the Loans shall be prepaid by Borrower on or before such date as shall be mandated by such Requirement of Law in an amount equal to the Redemption Price applicable on the date of such prepayment in accordance with Section 3.03(a); *provided* that no Prepayment Premium pursuant to Section 3.03(a)(ii) shall be due with respect thereto.

Section 5.03. Taxes.

(a) *Payments Free of Taxes.* Any and all payments by or on account of any Obligation shall be made without deduction or withholding for any Taxes, except as required by applicable Law. If any applicable Law (as determined in the good faith discretion of the Administrative Agent) requires the deduction or withholding of any Tax from any such payment by an Obligor, then such Obligor shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by such Obligor shall be increased as necessary so that after such deduction or withholding for Indemnified Taxes has been made (including such deductions and withholdings for Indemnified Taxes applicable to additional sums payable under this Section 5.03) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding for Indemnified Taxes been made. For purposes of this Section, the term "applicable Law" includes FATCA.

(b) *Payment of Other Taxes by Borrower.* Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable Law, or at the option of the Administrative Agent, timely reimburse it for, Other Taxes.

(c) *Evidence of Payments.* As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority, as a withholding Tax pursuant to this Section 5.03, Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, or a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) *Indemnification.* Borrower shall reimburse and indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 5.03) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) *Indemnification by the Lender.* Each Lender shall severally indemnify the Administrative Agent, within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), and (ii) any Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to such Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) *Status of Lenders.* (i) Any Lender that is entitled to an exemption from, or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower and the Administrative Agent at the time or times reasonably requested by Borrower or the Administrative Agent such properly completed and executed documentation reasonably requested by Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Law or as reasonably requested by Borrower or the Administrative Agent as will enable Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 5.03(f)(ii)(A), (B) or (D)) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing:

(A) any Lender that is a U.S. Person shall deliver to Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower

or the Administrative Agent), duly completed, valid, executed copies of IRS Form W-9 (or successor form) certifying that such Lender is exempt from U.S. Federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, duly completed, valid executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the “interest” article of such Tax treaty and (y) with respect to any other applicable payments under any Loan Document, duly completed, valid, executed originals of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the “business profits” or “other income” article of such Tax treaty;

(2) duly completed, valid, executed copies of IRS Form W-8ECI (or successor form);

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit D to the effect that such Foreign Lender is not a “bank” within the meaning of Section 881(c)(3)(A) of the Code, a “10 percent shareholder” of Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code (a “U.S. Tax Compliance Certificate”) and (y) executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, duly completed, valid, executed copies of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI (or successor form), IRS Form W-8BEN (or successor form), IRS Form W-8BEN-E (or successor form), a U.S. Tax Compliance Certificate, IRS Form W-9 (or successor form), and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), executed copies of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower and the Administrative Agent at the time or times prescribed by Law and at such time or times reasonably requested by Borrower or the Administrative Agent such documentation prescribed by applicable Law (including as prescribed by Section 1471(b)(3)(C) (i) of the Code) and such additional documentation reasonably requested by Borrower or the Administrative Agent as may be necessary for Borrower or the Administrative Agent to comply with its obligations under FATCA and to determine that such Lender has complied with such Lender’s obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), “FATCA” shall include any amendments made to FATCA after the date of this Agreement.

Each Recipient agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall promptly update such form or certification or promptly notify Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) *Treatment of Certain Refunds.* If any party to this Agreement determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 5.03 (including by the payment of additional amounts pursuant to this Section 5.03), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the written request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this Section 5.03(g), in no event will the indemnified party be

required to pay any amount to an indemnifying party pursuant to this Section 5.03(g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts giving rise to such refund had

never been paid. This Section 5.03(g) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) *Mitigation Obligations.* If Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or to any Governmental Authority for the account of any Lender pursuant to Section 5.01 or this Section 5.03, then such Lender shall (at the request of Borrower) use commercially reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates if, in the sole reasonable judgment of such Lender, such designation or assignment and delegation would (i) eliminate or reduce amounts payable pursuant to Section 5.01 or this Section 5.03, as the case may be, in the future, (ii) not subject such Lender to any unreimbursed cost or expense and (iii) not otherwise be disadvantageous to such Lender.

(i) *Survival.* Each party's obligations under this Article 5 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all Obligations under any Loan Document.

Section 5.04. Delay in Requests. Failure or delay on the part of any Lender to demand compensation pursuant to this Article 5 shall not constitute a waiver of such Lender's right to demand such compensation; *provided* that Borrower shall not be required to compensate a Lender pursuant to this Article for any increased costs incurred or reductions suffered more than six (6) months prior to the date that such Lender notifies Borrower of the change in Law giving rise to such increased costs or reductions, and of such Lender's intention to claim compensation therefor (except that, if the change in Law giving rise to such increased costs or reductions is retroactive, then the six (6) month period referred to above shall be extended to include the period of retroactive effect thereof).

ARTICLE 6

CONDITIONS PRECEDENT

Section 6.01. Conditions to Tranche A Loan; Closing Date. The obligation of each Lender to make the Tranche A Loan on the Closing Date shall not become effective until the following conditions precedent shall have been reasonably satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche A Loan hereunder):

(a) *Organization and Capitalization.* The organizational structure and pro-forma capitalization of the Obligors, after giving effect to the Transactions, as set forth on Schedule 7.19 shall be satisfactory to the Administrative Agent.

(b) *Terms of Material Agreements.* The Administrative Agent shall be satisfied in its sole discretion with the terms and conditions of all of the Obligors' Material Agreements.

(c) *No Law Restraining Transactions.* No applicable Law or regulation shall restrain, prevent or, in the reasonable judgment of the Administrative Agent, impose materially adverse conditions upon the Transactions.

(d) *Lien Searches.* The Administrative Agent shall be satisfied with Lien searches regarding the Obligors made prior to the Closing Date.

(e) *Documentary Deliveries.* The Administrative Agent shall have received the following documents, each of which shall be in form and substance satisfactory to the Administrative Agent:

(i) *Agreement.* This Agreement duly executed and delivered by Borrower and each of the other parties hereto.

(ii) *Security Documents.*

(A) The Security Documents, including, without limitation, the Security Agreement, each Short-Form IP Security Agreement and financing statements, each in form and substance satisfactory to the Administrative Agent and duly executed and delivered by each of the Obligors and the other parties thereto.

(B) The Collateral Questionnaire, duly executed and delivered by a Responsible Officer of Borrower, substantially in the form of Exhibit I hereto and otherwise in form and substance satisfactory to the Administrative Agent.

(C) Without limitation, all other documents and instruments reasonably required to perfect the Administrative Agent's Lien on, and security interest in, the Collateral required to be delivered on or prior to the Closing Date shall have been duly executed and delivered and be in proper form for filing, and shall create in favor of the Administrative Agent, a perfected Lien on, and security interest in, the Collateral, subject to no Liens other than Permitted Liens.

(iii) *Note.* Any Notes requested in accordance with Section 2.04.

(iv) *Approvals.* Borrower shall certify to the Administrative Agent that all material licenses, consents, authorizations and approvals of, and notices to and filings and registrations with, any Governmental Authority (including all foreign exchange approvals) in connection with the Transactions have been made or obtained, and all material third-party consents and approvals, necessary in connection with the execution, delivery and performance by the Obligor of the Loan Documents and the Transactions have been obtained.

(v) *Organizational Documents.* (A) Certified copies of the Organizational Documents of each Obligor and of resolutions of the Board (or similar governing body) of each Obligor approving and authorizing the execution, delivery and performance of this Agreement and each of the other Loan Documents to which it is a party, certified as of the Closing Date by a Responsible Officer of such Obligor as being in full force and effect without modification or amendment; (B) a good standing certificate and/or compliance certificate from the applicable Governmental Authority of each Obligor's (x) jurisdiction of incorporation and (y) jurisdiction(s) in which it is qualified as a foreign corporation or other entity to do business (except where failure to be in good standing would not, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect), each dated a recent date prior to the Closing Date; and (C) such other documents as the Administrative Agent may reasonably request.

(vi) *Incumbency Certificate.* A certificate of each Obligor as to the authority, incumbency and specimen signatures of the persons who have executed the Loan Documents and any other documents in connection herewith on behalf of the Obligor.

(vii) *Opinion of Counsel.* A favorable opinion, dated as of the Closing Date, of Wiggin and Dana LLP, counsel to each Obligor in form reasonably acceptable to the Administrative Agent and its counsel.

(viii) *Evidence of Insurance.* Certificates from Borrower's insurance broker or other evidence satisfactory to the Administrative Agent that all insurance required to be maintained pursuant to Section 8.05 is in full force and effect.

(ix) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(a)(ii) duly executed and delivered by a Responsible Officer of Borrower, in form and substance satisfactory to the Administrative Agent.

(f) *Due Diligence.* The Administrative Agent shall have received and be satisfied with all due diligence regarding the Obligor (including without limitation historical financial statements, Projections, technical, operational, legal, intellectual property, commercial market forecasts, clinical and regulatory assessments, supply chain, securities, labor, Tax, litigation, environmental, reimbursement and regulatory authority matters) in its sole discretion.

(g) *Indebtedness.* As of the Closing Date, after giving effect to the Transactions, no Obligor shall have Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A. All amounts due or outstanding in respect of any Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A shall have been repaid in full, all commitments (if any) in respect thereof terminated, all guarantees (if any) thereof discharged and released and all security therefor (if any) released, together with all fees and other amounts owing thereon, or documentation

in form and substance satisfactory to the Administrative Agent to effect such release upon such repayment and termination shall have been delivered to the Administrative Agent.

(h) *Closing Fees, Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, the Closing Fee and all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03, after deducting therefrom the Expense Deposit.

(i) *Warrant Certificate.* The Administrative Agent shall have received the executed Warrant Certificate, dated as of the Closing Date.

(j) *Representations and Warranties.* The representations and warranties of the Obligor contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Closing Date; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(k) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(l) *Miscellaneous.* The Administrative Agent and each Lender shall have received such other opinions, instruments, certificates and documents as the Administrative Agent or such Lender shall have reasonably requested with prior notice to Borrower.

(m) *Equity Raise.* Borrower shall have completed the Series D preferred equity raise on terms and provisions reasonably satisfactory to the Administrative Agent, which results in minimum gross cash proceeds to Borrower of at least \$75,000,000.

Section 6.02. Conditions to Tranche B Loan; Tranche B Loan Borrowing Date. The obligation of each Lender to make the Tranche B Loan on the Tranche B Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche B Loan hereunder):

(a) *Intentionally omitted.*

(b) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(b)(ii) requesting the Borrowing of the Tranche B Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

(c) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche B Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(d) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(e) *Officer's Certificate.* A certificate, dated as of the Tranche B Borrowing Date and signed by a Responsible Officer of Borrower, confirming compliance with the conditions set forth in this Section 6.02.

(f) *Milestone.* The Administrative Agent shall have received evidence satisfactory to the Administrative Agent that Borrower has received Total Revenue of at least \$20,000,000 for the twelve (12) month period most recently ended.

(g) *Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03.

The borrowing of the Loans shall constitute a certification by Borrower to the effect that the conditions set forth in Section 6.01 and Section 6.02, as applicable, have been fulfilled as of the Closing Date or the Tranche B Loan Borrowing Date, or waived by the Administrative Agent on behalf of the Lenders, as applicable.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES

In order to induce the Lenders to enter into this Agreement and to extend the Loans hereunder, each Obligor represents and warrants to the Administrative Agent and the Lenders, on the Closing Date and on the Tranche B Loan Borrowing Date, as applicable, that the following statements are true and correct:

Section 7.01. Power and Authority. Each Obligor and each of its Subsidiaries (a) is duly organized, validly existing and in good standing under the Laws of its jurisdiction of organization, (b) has all requisite corporate (or equivalent) power, and has all material governmental licenses, authorizations, consents and approvals necessary to own its assets and carry on its business as now being or as proposed to be conducted except to the extent that failure to have the same would not reasonably be expected to have a Material Adverse Effect, (c) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such

qualification necessary except where failure to so qualify would not (either individually or in the aggregate) reasonably be expected to have a Material Adverse Effect, and (d) has full power, authority and legal right to make and perform each of the Loan Documents and, in the case of Borrower, to borrow the Loans hereunder.

Section 7.02. Authorization; Enforceability. The Transactions are within each Obligor's corporate (or equivalent) powers and have been duly authorized by all necessary corporate (or equivalent) action and, if required, by all necessary shareholder or other equity holder action. The Loan Documents have been duly executed and delivered by each Obligor party thereto and constitutes, and each of the other Loan Documents to which it is a party when executed and delivered by such Obligor will constitute, a legal, valid and binding obligation of such Obligor, enforceable against each Obligor in accordance with its terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or similar Laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 7.03. Governmental and Other Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any other Person, except for (i) such as have been obtained or made and are in full force and effect, (ii) filings and recordings in respect of perfecting or recording the Liens created pursuant to the Security Documents and (iii) those consents listed on Schedule 7.03, (b) will not violate any Requirement of Law or the Organizational Documents of any Obligor or any order of any Governmental Authority, other than any such violations that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect, (c) will not violate or result in a default under any Material Agreement, or give rise to a right thereunder to require any payment to be made by any such Person, and (d) will not result in the creation or imposition of any Lien (other than Permitted Liens) on any asset of any Obligor or any of its Subsidiaries.

Section 7.04. Financial Statements; Projections; Material Adverse Change.

(a) *Financial Statements.* Borrower has heretofore furnished to the Administrative Agent certain financial statements as provided for in Section 8.01. Such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of the Obligors as of such dates and for such periods substantially in accordance with GAAP, subject to quarterly or year-end adjustments and the absence of footnotes. No Obligor has any material contingent liabilities or liabilities for taxes, long-term lease or unusual forward or long-term commitments not disclosed in the aforementioned financial statements.

(b) *Projections.* On and as of the Closing Date, the projections of the Obligors (collectively, the “*Projections*”) are based on good faith estimates and assumptions made by the management of Borrower; *provided*, the Projections are not to be viewed as facts and that actual results during the period or periods covered by the Projections may differ from such Projections and that the differences may be material; *provided, further*, as of the Closing Date, the management of Borrower believes that the Projections are reasonable and attainable.

(c) *No Material Adverse Change.* Since December 31, 2019, no event, circumstance or change has occurred that has caused or evidences, either in individually or in the aggregate, a Material Adverse Change.

Section 7.05. Properties.

(a) *Property Generally.* Each Obligor has good and marketable fee simple title to, or valid leasehold or license interests in, all its real and personal Property material to its business, subject only to Permitted Liens and except as would not reasonably be expected to interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) *Intellectual Property.* (i) Schedule 7.05(b) lists, with respect to each Obligor, all United States and foreign registrations of and applications for Patents, Trademarks, Copyrights, and industrial designs that are Obligor Intellectual Property, including the applicable jurisdiction, registration or application number and date, as applicable thereto, a designation as to whether it is Material Intellectual Property, and a designation as to whether it is licensed or owned by Obligor.

(ii) Each Obligor (A) owns or possesses all legal and beneficial rights, title and interest in and to Material Intellectual Property designated on Schedule 7.05(b) as being owned by such Obligor and (B) has the right to use the Material Intellectual Property licensed to such Obligor, in each case free and clear of any Liens or Claims of any kind, other than Permitted Liens.

(iii) To Obligors’ knowledge, the Material Intellectual Property does not violate any license or infringe any valid and enforceable Intellectual Property right of another.

(iv) Other than with respect to the Material Agreements, or as permitted by this Agreement, the Obligors have not assigned or otherwise transferred ownership of, or agreed to assign or otherwise transfer ownership of, any Material Intellectual Property, in whole or in part, to any Person who is not an Obligor.

(v) Other than as set forth on Schedule 7.05(b), the Obligors have not received any written communications, nor is there any pending or, to each Obligor’s knowledge, threatened action in writing, suit, proceeding or claim in writing by another, alleging that any of the Obligors has violated, infringed, diluted or misappropriated any Intellectual Property of another.

(vi) There is no pending or, to any Obligor’s knowledge, threatened action in writing, suit, proceeding or claim in writing by another: (a) challenging an Obligor’s rights in or to any Material Intellectual Property owned by such Obligor; or (b) challenging the validity, enforceability or scope of any Material Intellectual Property owned by an Obligor.

(vii) Each Obligor has taken commercially reasonable precautions to protect the secrecy, confidentiality and value of the Material Intellectual Property (including without limitation, by requiring that all relevant current and former employees, contractors and consultants of the Obligors execute written confidentiality and invention assignment Contracts).

(viii) Each Obligor has complied with the material terms of each Material Agreement pursuant to which Intellectual Property has been licensed to the Obligors (which material terms shall include, but not be limited to, pricing and duration of the agreement).

(ix) All maintenance fees, annuities, and the like due or payable on the Patents within Material Intellectual Property have been timely paid or the failure to so pay was the result of an intentional decision by the applicable Obligor, which would not reasonably be expected to result in a Material Adverse Change. All documents and instruments necessary to register or apply for or renew registration of all Patents, Trademarks and Copyrights within the Material Intellectual Property have been validly executed, delivered and filed in a timely manner with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

(x) To each Obligor’s knowledge, there are no material defects in any of the Patents within Material Intellectual Property and no such Patents within Material Intellectual Property have ever been finally adjudicated to be invalid, unpatentable or unenforceable for any reason in any administrative, arbitration, judicial or other proceeding.

(xi) To each Obligor’s knowledge, no Obligor has received any written notice asserting that the Patents within the Material Intellectual Property are invalid, unpatentable or unenforceable and, to each Obligor’s knowledge, no Obligor has engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate or render unpatentable or unenforceable any such Patent within the Material Intellectual Property.

(xii) Each employee and consultant has signed a written agreement assigning to the applicable Obligor all intellectual property rights that are related to such Obligor’s business as now conducted and as presently proposed to be conducted and

confidentiality provisions protecting trade secrets and confidentiality information of the Obligors.

(xiii) To the knowledge of each Obligor, no third party is infringing upon or misappropriating, or violating any material license or agreement with such Obligor relating to any Material Intellectual Property.

Section 7.06. No Actions or Proceedings.

(a) *Litigation.* There is no litigation, investigation or enforcement proceeding pending or threatened in writing with respect to any Obligor by or before any Governmental Authority or arbitrator (i) that either individually or in the aggregate would reasonably be expected to have a Material Adverse Effect or (ii) that involves this Agreement or the Transactions.

(b) *Environmental Matters.* The operations and the real Property of the Obligors comply with all applicable Environmental Laws, except to the extent the failure to so comply, either individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. To each Obligor's knowledge, there have been no conditions, occurrences or release of Hazardous Materials which would reasonably be expected to have a Material Adverse Effect.

(c) *Labor Matters.* No Obligor has engaged in unfair labor practices and there are no pending or, to any Obligor's knowledge, threatened in writing labor actions, disputes, grievance or arbitration proceedings involving the employees of any Obligor, in each case that would reasonably be expected to have a Material Adverse Effect. There is no material strike or work stoppage in existence or threatened in writing against any Obligor.

Section 7.07. Compliance with Laws and Agreements. Each Obligor is in compliance with all Requirements of Law (including CLIA and Environmental Laws) and all Contracts binding upon it or its Property, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

Section 7.08. Taxes. Each Obligor has timely filed or caused to be filed all federal income and other material Tax returns and reports required to have been filed and has paid or caused to be paid all federal income and other material Taxes required to have been paid by it, except Taxes that are being contested in good faith by appropriate proceedings and for which such Obligor has set aside on its books adequate reserves with respect thereto substantially in accordance with GAAP.

Section 7.09. Full Disclosure. Borrower has disclosed to the Lenders all Material Agreements to which any Obligor is party, and all other matters to its knowledge, that, individually or in the aggregate, would reasonably be expected to result in a Material Adverse Effect. None of the reports, financial statements, certificates or other information furnished by or on behalf of the Obligors to the Lenders in connection with the negotiation of this Agreement and the other Loan Documents or delivered hereunder or thereunder (as modified or supplemented by other information so furnished) contains any material misstatement of material fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

Section 7.10. Regulation.

(a) *Investment Company Act.* No Obligor is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940.

(b) *Margin Stock.* No Obligor is engaged principally, or as one of its important activities, in the business of extending credit for the purpose, whether immediate, incidental or ultimate, of buying or carrying Margin Stock, and no part of the proceeds of the Loans will be used to buy or carry any Margin Stock in violation of Regulation T, U or X.

Section 7.11. Solvency. The Obligors, on a consolidated basis, are and, immediately after giving effect to the Borrowings, the use of proceeds thereof, and the consummation of the Transactions, will be, Solvent.

Section 7.12. Subsidiaries. Except as set forth on Schedule 7.12 (as such Schedule may be updated by Borrower from time to time), Borrower has no direct or indirect Subsidiaries.

Section 7.13. Indebtedness and Liens. Set forth on Schedule 7.13A is a complete and correct list of all Permitted Indebtedness of each Obligor described in Section 9.01(b) as of the date hereof. Set forth on Schedule 7.13B is a complete and correct list of all Permitted Liens described in Section 9.02(b) granted by an Obligor with respect to its respective Property and outstanding as of the date hereof.

Section 7.14. Material Agreements. Set forth on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time) is a complete and correct list of (i) each Material Agreement and (ii) each Contract creating or evidencing any Material Indebtedness, together with a summary reference to the product or purpose of each such Material Agreement and such Contract, to which an Obligor is a party. Accurate and complete copies of each such Contract listed on such schedule have been made available to the Lenders. No Obligor is in default in any material respect under any such Material Agreement or such Contract creating or evidencing any Material Indebtedness listed on such schedule, and no Obligor has knowledge of any default in any material respect by any counterparty to such Material Agreement or such Contract. Except as otherwise disclosed on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time), all material vendor purchase agreements and provider Contracts of the Obligors, and all Material Agreements including a grant of rights under any Intellectual Property to an Obligor, are in full force and effect without material modification from the form in which the same were disclosed to the Lenders.

Section 7.15. Restrictive Agreements. None of the Obligor is party to any Restrictive Agreement, except (i) those listed on Schedule 7.15 or otherwise permitted under Section 9.11, (ii) restrictions and conditions imposed by Law or by the Loan Documents, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor and (iv) limitations associated with Permitted Liens.

Section 7.16. Real Property. No Obligor or any of its Subsidiaries owns or leases (as tenant thereof) any real Property on the date hereof, except as described on Schedule 7.16.

Section 7.17. Pension and Other Plans. Schedule 7.17 sets forth, as of the date hereof, a complete and correct list of, and that separately identifies, (a) all Title IV Plans, (b) all Multiemployer Plans and (c) all material Benefit Plans. Each Benefit Plan, and each trust thereunder, intended to qualify for Tax exempt status under Section 401 or 501 of the Code or other Requirements of Law so qualifies. Except for those that would not, in the aggregate, have a Material Adverse Effect, (x) each Benefit Plan is in compliance with applicable provisions of ERISA, the Code and other Requirements of Law, (y) there are no existing or pending (or to the knowledge of any Obligor or Subsidiary thereof, threatened) claims (other than routine claims for benefits in the normal course), sanctions, actions, lawsuits or other proceedings or investigation involving any Benefit Plan to which any Obligor or Subsidiary thereof incurs or otherwise has or would have an obligation or any liability or Claim and (z) no ERISA Event is reasonably expected to occur. Borrower and each of its ERISA Affiliates has met all applicable requirements under the ERISA Funding Rules with respect to each Title IV Plan, and no waiver of the minimum funding

standards under the ERISA Funding Rules has been applied for or obtained. As of the most recent valuation date for any Title IV Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is at least 60%, and neither Borrower nor any of its ERISA Affiliates knows of any facts or circumstances that would reasonably be expected to cause the funding target attainment percentage to fall below 60% as of the most recent valuation date. As of the date hereof, no ERISA Event has occurred in connection with which obligations and liabilities (contingent or otherwise) remain outstanding. No ERISA Affiliate would have any Withdrawal Liability as a result of a complete withdrawal from any Multiemployer Plan on the date this representation is made.

Section 7.18. Collateral; Security Interest. Each Security Document is effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral subject thereto and each such security interest is perfected to the extent required by (and has the priority required by) the applicable Security Document, subject to Permitted Liens. The Security Documents collectively are effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral, which upon the filing of financing statements and other similar statements filed in the appropriate offices, such security interests are perfected security interests (subject only to Permitted Liens) to the extent that such perfection may be obtained by such filing.

Section 7.19. Capitalization. All of the issued and outstanding securities of each Obligor have been duly authorized, are validly issued, fully paid, and non-assessable. As of the Closing Date and except as set forth on Schedule 7.19, there are no outstanding or authorized options, warrants, purchase rights, subscription rights, conversion rights, exchange rights, or other contracts or commitments that could require the Obligor to issue, sell, or otherwise cause to become outstanding any of their ownership interests. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, or similar rights with respect to the Obligor. None of the Equity Interests in any Obligor has been mortgaged, assigned or pledged in favor of any Person, other than pursuant to the Security Agreement.

Section 7.20. Insurance. Each Obligor has obtained (and is maintaining), insurance for its assets (including the Collateral) and business as required under the Loan Documents.

Section 7.21. Certain Fees. Except as described on Schedule 7.21, no broker's or finder's fee will be payable in connection with the execution and delivery of this Agreement.

Section 7.22. Sanctions Laws. Obligor and, to the knowledge of the Obligor, any director, officer or employee of an Obligor acting on behalf of the Obligor, are in compliance with the Sanctions Laws.

Section 7.23. Anti-Corruption Laws. No Obligor nor any of its Subsidiaries has, nor, to the knowledge of any Responsible Officer of any Obligor, has any director, officer, agent or employee of any Obligor acting on behalf of such Obligor (i) taken any action, directly or indirectly, that would result in a violation by such Persons of the Anti-Corruption Laws, (ii) made, offered to make, promised to make or authorized the payment or giving of, directly or indirectly, any

Prohibited Payment or (iii) been subject to any investigation by any Governmental Authority with regard to any actual or alleged Prohibited Payment.

Section 7.24. Anti-Terrorism Laws. The Obligor (i) have taken reasonable measures to ensure compliance with applicable Economic Sanctions Laws and Anti-Terrorism Laws, (ii) are not Designated Persons and (iii) have not used any part of the proceeds from any advance on behalf of any Designated Person or has not used, directly by it or indirectly through any Subsidiary, such proceeds in connection with any investment in, or any transactions or dealings with, any Designated Person.

ARTICLE 8

AFFIRMATIVE COVENANTS AND FINANCIAL COVENANTS

Each Obligor covenants and agrees with the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 8.01. *Financial Statements and Other Information.* It will furnish to the Administrative Agent for distribution to the Lenders:

(a) as soon as available and in any event within thirty-five (35) days after the end of each month prior to a Qualified Public Offering, the consolidated balance sheet of the Obligors as of the end of each such month, and the related consolidated statements of income and cash flows of the Obligors for such month and the portion of the fiscal year through the end of such month, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligors as at such date and the results of operations of the Obligors for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal, quarterly or year-end adjustments and except for the absence of notes;

(b) as soon as available and in any event within forty-five (45) days after the end of the first three fiscal quarters of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such quarter, and the related consolidated statements of income and cash flows of the Obligors for such quarter and the portion of the fiscal year through the end of such quarter, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with (i) a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligors as at such date and the results of operations of the Obligors for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal quarterly or year-end adjustments and except for the absence of footnotes and (ii) a management's discussion and analysis of the financial

condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Quarterly Report on Form 10-Q with the SEC shall be deemed to satisfy the requirements of this Section 8.01(b) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(c) as soon as available and in any event within one hundred fifty (150) days after the end of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such fiscal year, and the related consolidated statements of income, shareholders' equity and cash flows of the Obligors for such fiscal year, prepared substantially in accordance with GAAP consistently applied, all in reasonable detail and setting forth in comparative form the figures for the previous fiscal year, accompanied by (i) a report and opinion thereon of Cohn Reznick LLP or another independent certified public accountant acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or like qualification or exception (other than solely with respect to, or expressly resulting solely from, the repayment of the Loans on the Stated Maturity Date) or any qualification or exception as to the scope of such audit and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Yearly Report on Form 10-K with the SEC shall be deemed to satisfy the requirements of this Section 8.01(c) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(d) within thirty-five (35) days after the end of each month, a compliance certificate of a Responsible Officer of Borrower as of the end of the applicable accounting period (which delivery may, unless a Lender requests executed originals, be by electronic communication including email and shall be deemed to be an original authentic counterpart thereof for all purposes) in the form of Exhibit E (a "Compliance Certificate") which, for purposes of clarification, shall (i) demonstrate the Obligors' compliance with Section 8.15(a) in respect of such month, (ii) for each month end that coincides with the end of a fiscal quarter of Borrower, state that the representations and warranties made by the Obligors in Article 7 are true in all material respects on and as of the date thereof; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects, (iii) for each month end that coincides with the end of a fiscal quarter of Borrower, demonstrate Borrower's compliance with Section 8.15(b) in respect of such fiscal quarter and (iv) for each month end that coincides with the end of a fiscal year of Borrower, provide Obligors' updated Schedules to this Agreement (if any);

(e) promptly, and in any event within five (5) Business Days after receipt thereof by an Obligor, copies of each notice or other correspondence received from any

securities regulator or exchange to the authority of which an Obligor is subject concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of such Obligor;

(f) the information regarding insurance maintained by the Obligors as and when required under Section 8.05;

(g) promptly following the Lenders' written request at any time, proof of the Obligors' compliance with Section 8.15(a);

(h) within ten (10) days of delivery, copies of all periodic reports distributed by Borrower to its shareholders generally; *provided* that (i) any such material may be redacted by Borrower to exclude information relating to the Loan Documents or the Lenders and (ii) the Lenders shall not be entitled to receive statements, reports and notices relating to topics that (x) are subject to attorney-client privilege or (y) present a conflict of interest for the Lenders;

(i) a financial forecast for the Obligors for each fiscal year, including forecasted balance sheets, statements of income and cash flows of the Obligors, all of which shall be prepared on a consolidated basis and delivered not later than February 28 of such fiscal year;

(j) promptly following any Lender's written request, certification that such Obligor is not a passive foreign investment company ("PFIC") within the meaning of Sections 1291 through 1297 of the Code, or, if such Obligor determines that it is a PFIC, such information as would allow the Lender to make a qualified electing fund election with respect to the stock of the Obligor;

(k) after Borrower becomes a Publicly Reporting Company, within five (5) Business Days of filing, provide access (via posting and/or links on Borrower's web site) to all reports on Form 10-K and Form 10-Q filed with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange; and within five (5) Business Days of filing, provide notice and access (via posting and/or links on Borrower's web site) to all reports on Form 8-K filed with the SEC, and copies of (or access to, via posting and/or links on Borrower's web site) all other reports, proxy statements and other materials filed by Borrower with the SEC, any Governmental Authority succeeding to any of the functions of the SEC or with any national securities exchange;

(l) promptly after the receipt thereof, a copy of any "management letter" received from its certified public accounts and the management's response thereto; and

(m) such other information respecting the operations, properties, business or condition (financial or otherwise) of the Obligors (including with respect to the Collateral) as the Lenders may from time to time reasonably request.

Section 8.02. Notices of Material Events. It will furnish to the Administrative Agent for distribution to the Lenders written notice of the following promptly after a Responsible Officer of an Obligor first learns of the existence of:

(a) the occurrence of any Default or Event of Default;

(b) the occurrence of any event with respect to any Obligor's Property resulting in a Loss, to the extent not covered by insurance, aggregating \$250,000 or more;

(c) (i) any proposed Acquisition by any Obligor that would reasonably be expected to result in environmental liability under Environmental Laws in excess of \$250,000, and (ii) in each case, to the extent that any of the following would reasonably be expected to result in liability in excess of \$250,000: (A) spillage, leakage, discharge, disposal, leaching, migration or release of any Hazardous Material required to be reported to any Governmental Authority under applicable Environmental Laws, and (B) all actions, suits, claims, notices of violation, hearings, investigations or proceedings pending, or threatened in writing against or affecting any Obligor or any of its Subsidiaries or with respect to the ownership, use, maintenance and operation of their respective businesses, operations or properties, relating to Environmental Laws or Hazardous Material;

(d) the assertion of any environmental matter by any Person in writing against, or with respect to the activities of, any Obligor or any of its Subsidiaries and any alleged violation of or non-compliance with any Environmental Laws or any permits, licenses or authorizations, in each case, which would reasonably be expected to involve damages in excess of \$250,000 other than any environmental matter or alleged violation that, if adversely determined, would not (either individually or in the aggregate) have a Material Adverse Effect;

(e) the filing or commencement of any action, suit or proceeding by or before any arbitrator or Governmental Authority against or directly affecting any Obligor or any of its Subsidiaries, in each case, that would reasonably be expected to result in a Material Adverse Effect;

(f) (i) on or prior to any filing by any ERISA Affiliate of any notice of intent to terminate any Title IV Plan, a copy of such notice and (ii) promptly, and in any event within ten (10) days, after any Responsible Officer of any ERISA Affiliate knows or has reason to know that a request for a minimum funding waiver under Section 412 of the Code has been filed with respect to any Title IV Plan or Multiemployer Plan, a notice (which may be made by telephone if promptly confirmed in writing) describing such waiver request and any action that any ERISA Affiliate proposes to take with respect thereto, together with a copy of any notice filed with the PBGC or the IRS pertaining thereto;

(g) within five (5) Business Days of obtaining written notice or knowledge thereof, (i) the termination of any Material Agreement; (ii) the receipt by any Obligor or any of its Subsidiaries of a written notice under any Material Agreement (and a copy thereof) asserting a default by such Obligor or any of its Subsidiaries where such alleged

default would permit such counterparty to terminate such Material Agreement; (iii) the entering into any new Material Agreement by an Obligor (and a copy thereof); or (iv) any amendment to a Material Agreement that would be materially adverse to the Lenders (and a copy thereof) (which includes, but is not limited to, any amendments to provisions relating to pricing and term), *provided* that notices required under this subsection (g) may be delivered with Borrower's monthly Compliance Certificate unless any of the foregoing events would reasonably be expected to have a Material Adverse Effect;

(h) any product recalls, safety alerts, corrections, withdrawals, marketing suspensions, removals or the like conducted, to be undertaken or issued by any Obligor or any of its Subsidiaries, whether or not at the request, demand or order of any Governmental Authority;

(i) within five (5) Business Days of obtaining written notice or knowledge thereof, any infringement or other violation by any Person of any Obligor Intellectual Property that would reasonably be expected to result in a Material Adverse Effect;

(j) within five (5) Business Days of obtaining written notice or knowledge thereof, a material licensing agreement or arrangement entered into by any Obligor or any of its Subsidiaries in connection with any material infringement or alleged infringement of the Intellectual Property of another Person;

(k) within five (5) Business Days of obtaining written notice or knowledge thereof, any written claim by any Person that the conduct of any Obligor's (or any Subsidiary thereof) business, including the development, manufacture, use, sale or other commercialization of any product, infringes any Intellectual Property of such Person, except to the extent any such claim would not reasonably be expected to result in a Material Adverse Effect;

(l) the reports and notices as and when required by the Security Documents;

(m) within thirty (30) days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to Section 8.01, notice of any material change in accounting policies or financial reporting practices by the Obligors;

(n) promptly after the occurrence thereof, notice of any labor controversy resulting in or threatening to result in any strike, work stoppage, boycott, shutdown or other material labor disruption against or involving an Obligor (or any Subsidiary thereof);

(o) any other development that results in, or would reasonably be expected to result in, a Material Adverse Effect;

(p) concurrently with the delivery of financial statements under Section 8.01(a), (b) or (c), the creation or other acquisition of any Intellectual Property by any Obligor or any Subsidiary after the date hereof and during such prior fiscal year which is registered or becomes registered or the subject of an application for registration with the

United States Copyright Office or the United States Patent and Trademark Office, as applicable, or with any other equivalent foreign Governmental Authority; and

(q) any change to any Obligor's ownership of Deposit Accounts, Securities Accounts and Commodity Accounts, by delivering to the Lenders an updated Schedule 7 to the Security Agreement setting forth a complete and correct list of all such accounts as of the date of such change.

Each notice delivered under this Section 8.02 shall be accompanied by a statement of a Responsible Officer of Borrower setting forth in reasonable detail the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

Notwithstanding any contrary provision of this Agreement or any other Loan Document (including, without limitation, Sections 8.01 and 8.02), until such time as the Administrative Agent provides written notice to Borrower that it no longer desires to receive information that constitutes material non-public information, Borrower shall provide any information required pursuant to the terms hereof, including any information that may be material non-public information, to the Administrative Agent; *provided*, that notwithstanding the foregoing, Borrower shall at all times comply with Section 8.01(d)(i)-(iii), 8.01(k) and 8.02(a).

Section 8.03. Existence; Maintenance of Properties, Etc. (a) It will, and will cause each of its Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence; *provided* that the foregoing shall not prohibit any merger, amalgamation, consolidation, liquidation or dissolution permitted under Section 9.03.

(b) It shall, and shall cause each of its Subsidiaries to, maintain and preserve all rights, licenses, permits, privileges and franchises material to the conduct of its business, and maintain and preserve all of its assets and properties necessary to the conduct of its business in good working order and condition, ordinary wear and tear and damage from casualty or condemnation excepted.

(c) It shall, and shall cause each of its Subsidiaries to, use commercially reasonable efforts to cause each new employee and contractor to execute and deliver a customary confidentiality, non-disclosure and Intellectual Property assignment agreement that includes a waiver of moral rights.

Section 8.04. Payment of Obligations. It will, and will cause each of its Subsidiaries to, pay and discharge (i) all federal income and other material Taxes, fees, assessments and governmental charges or levies imposed upon it or upon its properties or assets prior to the date on which penalties attach thereto, and all lawful claims for labor, materials and supplies which, if unpaid, might become a Lien (other than a Permitted Lien) upon any properties or assets of any Obligor, except to the extent such Taxes, fees, assessments or governmental charges or levies, or such claims, are being contested in good faith by appropriate proceedings and are adequately reserved against substantially in accordance with GAAP, (ii) all lawful claims which, if unpaid, would by Law become a Lien upon its Property not constituting a Permitted Lien and (iii) all other obligations if the failure to discharge such obligation would reasonably be expected to result in a Material Adverse Effect.

Section 8.05. Insurance. At its own cost and expense, it will, and will cause each of its Subsidiaries, to obtain and maintain, with financially sound and reputable insurers, insurance of the kinds, and in the amounts, as are consistent with customary practices and standards of its industry in the same or similar locations, it being understood and agreed that the insurance held by the Obligors on the Closing Date is deemed to fulfill this requirement on the date hereof. All of the insurance policies required pursuant to this Section 8.05 will name the Administrative Agent as a "loss payee," "additional insured" or "mortgagee," as applicable and as its interests may appear. Borrower will use its commercially reasonable efforts to ensure, or to cause others to ensure, that all insurance

policies required pursuant to this Section 8.05 shall provide that they shall not be terminated or cancelled nor shall any policy be materially changed in a manner adverse to the insured Person without at least thirty (30) days' written notice to insured Person and the Administrative Agent. Receipt of notice of termination or cancellation of any such insurance policies shall entitle the Administrative Agent to renew any such policies, all in accordance with the first sentence of this Section 8.05 or otherwise to obtain similar insurance in place of such policies, in each case at the expense of Borrower (payable within three (3) Business Days of Borrower's receipt of written demand therefor) and, unless an Event of Default has occurred and is continuing, with the prior written consent of Borrower (such consent not to be unreasonably withheld). The amount of any such expenses shall accrue interest at the Default Rate if not paid when due and shall constitute "Obligations." All of the insurance policies required hereby will be evidenced by one or more certificates of insurance, together with appropriate loss payee or additional insured clauses or endorsements in favor of the Administrative Agent as required by this Section, delivered to the Administrative Agent on or before the Closing Date (or, with respect to such endorsements, within the time period set forth in Section 8.19) and at such other times as the Administrative Agent may request from time to time.

Section 8.06. Books and Records; Inspection Rights. It will, and will cause each of its Subsidiaries to, keep proper books of record and account in which full, true and correct entries are made of all dealings and transactions in relation to its business and activities. It will, and will cause each of its Subsidiaries to, permit any representatives designated by the Administrative Agent, upon reasonable prior notice and at reasonable times, to visit and inspect its properties, to examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times during normal business hours and with reasonable advance notice as the Administrative Agent may request. It will, and will cause each of its Subsidiaries to, pay all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent (a) so long as no Default has occurred and is continuing, for no more than two (2) such inspections each calendar year and (b) during a continuing Default, all such inspections.

Section 8.07. Compliance with Laws. (a) It will, and will cause each of its Subsidiaries to, (i) comply in all material respects with all Requirements of Law (including Environmental Laws) and (ii) comply in all material respects with all terms of outstanding Indebtedness and all Material Agreements, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

(b) Each Obligor will maintain, and will cause each of its Subsidiaries to maintain, all records required to be maintained by a Governmental Authority, except where failure to do so, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

Section 8.08. Licenses. It will, and will cause each of its Subsidiaries to, obtain and maintain all licenses, authorizations, consents, filings, exemptions, registrations and other Governmental Approvals necessary in connection with the execution, delivery and performance of the Loan Documents, the consummation of the Transactions or the operation and conduct of its business and ownership of its properties, except where failure to do so would not reasonably be expected to have a Material Adverse Effect.

Section 8.09. Action under Environmental Laws. It will, and will cause each of its Subsidiaries to, upon a Responsible Officer becoming aware of the release of any Hazardous Materials or the existence of any environmental liability under applicable Environmental Laws with respect to their respective businesses, operations or properties, take all actions, at their cost and expense, as shall be required by applicable Law to investigate and clean up the condition of their respective businesses, operations or properties, including all required removal, containment and remedial actions, and restore their respective businesses, operations or properties to a condition, in each case in material compliance with applicable Environmental Laws.

Section 8.10. Use of Proceeds. The proceeds of the Loans will be used only as provided in Section 2.05. No part of the proceeds of the Loans will be used, whether directly or indirectly, for any purpose that violates any of the Regulations of the Board of Governors of the Federal Reserve System, including Regulations T, U and X.

Section 8.11. Certain Obligations Respecting Subsidiaries; Further Assurances; Intellectual Property.

(a) *Subsidiaries.* It will take such action, and will cause each of its Subsidiaries to take such action, from time to time as shall be necessary to ensure that all Subsidiaries are "Guarantors" hereunder. Without limiting the generality of the foregoing, in the event that any Obligor shall form or acquire any new Subsidiary, it and its Subsidiaries will promptly and in any event within fifteen (15) days (or such longer time as consented to by the Administrative Agent in writing) of the formation or Acquisition of such Subsidiary:

(i) cause such new Subsidiary to become a "Guarantor" hereunder, and a "Grantor" under the Security Documents, pursuant to a Guarantee Assumption Agreement;

(ii) take such action or cause such Subsidiary to take such action (including delivering such Equity Interests together with undated transfer powers executed in blank) as shall be necessary to create and perfect valid and enforceable first priority (subject to Permitted Priority Liens) Liens on substantially all of the personal Property of such new Subsidiary as collateral security for the obligations of such new Subsidiary hereunder;

(iii) to the extent that the parent of such Subsidiary is not a party to the Security Documents or has not otherwise pledged Equity Interests in its Subsidiaries in accordance with the terms of the Security Documents and this Agreement, cause the parent of such Subsidiary to execute and deliver a pledge agreement in favor of the Lenders, in respect of all outstanding issued shares of such Subsidiary; and

(iv) deliver such proof of corporate action, incumbency of officers, opinions of counsel and other documents as is consistent with those delivered by each Obligor pursuant to Section 6.01 or as the Majority Lenders shall have requested;

provided, that solely with respect to any Subsidiary that is an Immaterial Foreign Subsidiary, no such actions shall be required other than a pledge by owner of such Immaterial Foreign Subsidiary of 100% of the Equity Interests of such Immaterial Foreign Subsidiary, which pledge shall, at the Administrative Agent's discretion be perfected under the Law of such Immaterial Foreign Subsidiary's jurisdiction of formation. For the avoidance of doubt, in the event that any Subsidiary ceases to qualify as an Immaterial Foreign Subsidiary, it shall be required to comply with clauses (a)(i)-(iii) hereof as if it was formed or Acquired on the date it ceased to qualify as an Immaterial Foreign Subsidiary.

(b) *Further Assurances.* It will, and will cause each of its Subsidiaries to, take such action from time to time as shall reasonably be requested in writing by the Majority Lenders to effectuate the purposes and objectives of this Agreement. Without limiting the generality of the foregoing, it will, and will cause each Person that is required to be a Guarantor to, take such action from time to time (including executing and delivering such assignments, security agreements, control agreements and other instruments) as shall be reasonably requested in writing by the Majority Lenders to create, in favor of the Lenders, perfected security interests and Liens (subject to Permitted Liens) in substantially all of the personal Property of such Obligor as collateral security for the Obligations; provided that any such security interest or Lien shall be subject to the relevant requirements of the Security Documents.

(c) *Intellectual Property.* In the event that any Obligor creates, develops or acquires Obligor Intellectual Property during the term of this Agreement, then the provisions of this Agreement shall automatically apply thereto and any such Obligor Intellectual Property shall automatically constitute part of the Collateral under the Security Documents, without further action by any party, in each case from and after the date of such creation, development or acquisition (except that any representations or warranties of any Obligor shall apply to any such Obligor Intellectual Property only from and after the date, if any, subsequent to such acquisition that such representations and warranties are brought down or made anew as provided herein). In the event that any Obligor holds or acquires Obligor Intellectual Property during the term of this Agreement, then, upon the request of the Administrative Agent, such Obligor shall take any action as shall be reasonably necessary and reasonably requested by the Administrative Agent to ensure that the provisions of this Agreement and the Security Agreement shall apply thereto and any such Obligor Intellectual Property shall constitute part of the Collateral under the Security Documents

Section 8.12. Termination of Non-Permitted Liens. In the event that any Responsible Officer of Borrower shall become aware or be notified by the Lenders of the existence of any

outstanding Lien against any Property of any Obligor, which Lien is not a Permitted Lien, such Obligor shall use its best efforts to promptly terminate or cause the termination of such Lien.

Section 8.13. Non-Consolidation. It will, and will cause each of its Subsidiaries to, (i) maintain entity records and books of account separate from those of any other entity which is an Affiliate of such entity; and (ii) not commingle its funds or assets with those of any other entity which is an Affiliate of such entity.

Section 8.14. Anti-Terrorism and Anti-Corruption Laws. No Obligor shall engage in any transaction that violates any of the applicable prohibitions set forth in any Economic Sanctions Law, Anti-Terrorism Law, or the *US Foreign Corrupt Practices Act of 1977* (15 USC. §§ 78dd-1 *et seq.*). None of the funds or assets of such Obligor or any Subsidiary that are used to repay the Loans shall constitute property of, or shall be beneficially owned by, any Designated Person or, to such Obligor's knowledge, be the direct proceeds derived from any transactions that violate the prohibitions set forth in any applicable Economic Sanctions Law, and no Designated Person shall have any direct or indirect interest in such Obligor insofar as such interest would violate any Economic Sanctions Laws applicable to such Obligor.

Section 8.15. Financial Covenants.

(a) *Minimum Liquidity.* Borrower shall ensure that the Obligors shall have aggregate Unrestricted Cash of not less than \$3,000,000 at all times.

(b) *Minimum Total Revenue.* As of the end of the fiscal quarter ended June 30, 2021 and each fiscal quarter thereafter, the Obligors shall maintain, on a consolidated basis, Total Revenue for the twelve (12) month period most recently ended on such date of not less than the amount set forth in the table below:

<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
June 30, 2021	\$15,017,000
September 30, 2021	\$16,844,000
December 31, 2021	\$19,482,000
March 31, 2022	\$22,988,000
June 30, 2022	\$27,455,000
September 30, 2022	\$32,305,000
December 31, 2022	\$37,938,000
March 31, 2023	\$42,076,000
June 30, 2023	\$46,752,000

<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
September 30, 2023	\$51,562,000
December 31, 2023	\$56,730,000
March 31, 2024	\$62,891,000
June 30, 2024	\$69,064,000
September 30, 2024	\$74,442,000
December 31, 2024	\$79,227,000
March 31, 2025	\$85,526,000
June 30, 2025	\$92,295,000
September 30, 2025	\$99,058,000
December 31, 2025	\$106,016,000

Section 8.16. Maintenance of Material Contracts, Intellectual Property, Etc. Such Obligor will, and will cause each of its Subsidiaries (to the extent applicable) to: (i) maintain in full force and effect for the term thereof all Material Agreements, or other rights necessary for the current operations of such Obligor’s or such Subsidiary’s business, as the case may be and (ii) maintain in full force and effect all Material Intellectual Property owned or controlled by such Obligor or any such Subsidiary that is used in and necessary for the current operations of such Obligor’s or such Subsidiary’s business, as the case may be.

Section 8.17. Cash Management. It will:

(a) subject to Section 8.19, maintain all Deposit Accounts, Securities Accounts, Commodity Accounts and lockboxes (other than Excluded Accounts) with a bank or financial institution that has executed and delivered to the Administrative Agent an account control agreement, in form and substance reasonably acceptable to the Administrative Agent (each such Deposit Account, Securities Account, Commodity Account and lockbox, a “*Controlled Account*”); and

(b) deposit promptly, and in any event no later than five (5) Business Days after the date of receipt thereof, all cash, checks, drafts or other similar items of payment relating to or constituting payments made in respect of any and all accounts and other rights and interests into Controlled Accounts.

Section 8.18. Board Observer Rights Until the Obligations have been paid in full in cash, Borrower shall permit the Administrative Agent on behalf of all of the Lenders (the “*Observer*”) to attend and observe (but not vote) at all meetings of Borrower’s (or any Subsidiary’s, as applicable) Board or any Committee, whether in person, by telephone or otherwise as requested by the Observer. Borrower and such Subsidiaries shall notify the Observer in writing at the same

time as furnished to members of the applicable Board or Committee of (i) the date and time for each general or special meeting of any such Board or Committee and (ii) the adoption of any resolutions or actions by any such Board or any such Committee by written consent (describing, in reasonable detail, the nature and substance of such action). Borrower and each of its Subsidiaries shall concurrently deliver to the Observer all notices and any materials delivered to the official members of such Board or Committee in connection with a meeting or action to be taken by written consent, including a draft of any material resolutions or actions proposed to be adopted by written consent. The Observer shall be free prior to such meeting or adoption by written consent to contact members of any applicable Board or Committee and discuss the pending actions to be taken. Notwithstanding the foregoing, the Observer shall not be entitled to receive materials relating to, or be in attendance for, any discussions relating to topics which (x) are subject to attorney client privilege or (y) present a conflict of interest for the Observer. All such discussions and materials shall be subject to the confidentiality provisions set forth in Section 13.17.

Section 8.19. Post-Closing Obligations. Within the time periods specified on Schedule 8.19 (as each may be extended by the Administrative Agent in its sole discretion), complete such undertakings as are set forth on Schedule 8.19.

ARTICLE 9

NEGATIVE COVENANTS

Each Obligor covenants and agrees with the Administrative Agent and the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 9.01. Indebtedness. It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Indebtedness, whether directly or indirectly, except:

- (a) the Obligations;
- (b) Indebtedness existing on the date hereof and set forth in Schedule 7.13A and Permitted Refinancings thereof;
- (c) accounts payable to trade creditors for goods and services and current operating liabilities (not the result of the borrowing of money) incurred in the Ordinary Course of Business;
- (d) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by it or any of its Subsidiaries in the Ordinary Course of Business;

(e) unsecured Indebtedness of an Obligor to any other Obligor; *provided* such Indebtedness is pledged to the Administrative Agent for the benefit of the Lenders under the Security Agreement and otherwise subordinate in right of payment to the Obligations;

(f) Guarantees by any Obligor of Indebtedness of any other Obligor;

(g) purchase money Indebtedness and Capital Lease Obligations; *provided* that (i) if secured, the collateral therefor consists solely of the assets being financed, the products and proceeds thereof and books and records related thereto, (ii) in the case of purchase money Indebtedness, such Indebtedness shall not constitute less than 75% of the aggregate consideration paid with respect to such asset, and (iii) the aggregate outstanding principal amount of such Indebtedness does not exceed \$1,000,000 at any time;

(h) unsecured workers' compensation claims, payment obligations in connection with health, disability or other types of social security benefits, unemployment or other insurance obligations, reclamation and statutory obligations, in each case incurred in the Ordinary Course of Business;

(i) Indebtedness under Hedging Agreements permitted pursuant to Section 9.05(f);

(j) Indebtedness approved in advance in writing by the Majority Lenders;

(k) Indebtedness of Borrower and its Subsidiaries with respect to corporate credit cards not to exceed \$250,000 at any time outstanding; and

(l) so long as no Default shall have occurred and is continuing at the time of such Indebtedness is incurred, or after giving effect thereto, other unsecured Indebtedness in an aggregate principal amount not to exceed \$500,000 at any time outstanding.

Section 9.02. Liens. It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Lien on any Property now owned by it, except:

(a) Liens securing the Obligations;

(b) any Lien on any Property of any Obligor existing on the date hereof and set forth in Schedule 7.13B; *provided* that (i) no such Lien shall extend to any other Property of such Obligor and (ii) any such Lien shall secure only those obligations which it secures on the date hereof and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;

(c) Liens securing Indebtedness permitted under Section 9.01(g); *provided* that such Liens are restricted solely to the collateral described in Section 9.01(g);

(d) Liens imposed by Law which were incurred in the Ordinary Course of Business, including (but not limited to) carriers', warehousemen's, landlords' and mechanics' liens, liens relating to leasehold improvements and other similar liens arising in the Ordinary Course of Business and which (i) do not in the aggregate materially detract from the value of the Property subject thereto or materially impair the use thereof in the operations of the business of such Person or (ii) are being contested in good faith by

appropriate proceedings, which proceedings have the effect of preventing the forfeiture or sale of the Property subject to such liens and for which adequate reserves have been made if required substantially in accordance with GAAP;

(e) Liens, pledges or deposits made in the Ordinary Course of Business in connection with bids, contracts, leases, appeal bonds, workers' compensation, unemployment insurance or other similar social security legislation;

(f) Liens securing Taxes, assessments and other governmental charges, the payment of which is not yet due or is being contested in good faith by appropriate proceedings promptly initiated and diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made;

(g) servitudes, easements, rights of way, restrictions and other similar encumbrances on real Property imposed by applicable Laws and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of Property or minor imperfections in title thereto which, in the aggregate, are not material, and which do not in any case materially detract from the value of the Property subject thereto or interfere with the ordinary conduct of the business of any of the Obligors;

(h) bankers' liens, rights of setoff and similar Liens incurred in the Ordinary Course of Business and arising in connection with the Obligors' deposit accounts or securities accounts held at financial institutions solely to secure payment of fees and similar costs and expenses of such financial institutions with respect to such accounts;

(i) Liens in connection with transfers permitted under Section 9.09;

(j) any judgment lien or lien arising from decrees or attachments not constituting an Event of Default;

(k) leases or subleases of real property granted in the Ordinary Course of Business, and leases, subleases, nonexclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the Ordinary Course of Business;

(l) Liens in favor of customs and revenue authorities arising as a matter of law to secure the payment of custom duties in connection with the importation of goods, not securing an amount in the aggregate in excess of \$100,000 at any given time;

(m) Liens on a deposit account of the Obligors and the cash and cash equivalents therein, in each case, securing Indebtedness described in Section 9.01(k); and

(n) Permitted Licenses solely to the extent that such Permitted License would constitute a Lien;

provided that no Lien otherwise permitted under any of the foregoing Sections 9.02 (excluding Sections 9.02(a) and 9.02(n)) shall apply to any Material Intellectual Property.

Section 9.03. Fundamental Changes and Acquisitions. It will not, and will not permit any of its Subsidiaries to, (i) enter into or consummate any transaction of merger, amalgamation or consolidation, including without limitation, a reverse-triangular merger, or other similar transaction or series of related transactions, (ii) liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution) (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws), (iii) make or consummate any Acquisition, (iv) make any initial public offering that is not a Qualified Public Offering or (v) sell or issue any Disqualified Equity Interests, except:

(a) Investments permitted under Section 9.05;

(b) Permitted Acquisitions for (i) aggregate cash consideration not to exceed \$2,000,000 and (ii) total consideration not to exceed \$5,000,000, in each case, for the course of this Agreement; and

(c) the merger, amalgamation or consolidation of any Obligor with or into any other Obligor, *provided* that (i) Borrower is a party to such merger, amalgamation or consolidation, Borrower shall be the surviving entity and (ii) if a Domestic Subsidiary is a party to such merger, amalgamation or consolidation with a Foreign Subsidiary, the Domestic Subsidiary shall be the surviving entity.

Section 9.04. Lines of Business. It will not, and will not permit any of its Subsidiaries to, engage to any material extent in any business other than the business engaged in on the date hereof by such Obligor, or a business reasonably related, incidental or complementary thereto or reasonable extensions thereof.

Section 9.05. Investments. It will not, and will not permit any of its Subsidiaries to, make, directly or indirectly, or permit to remain outstanding any Investments except:

(a) Investments outstanding on the date hereof and identified in Schedule 9.05 and any modification, replacement, renewal or extension thereof to the extent not involving new or additional Investments;

(b) operating deposit accounts with banks;

(c) extensions of credit in the nature of accounts receivable or notes receivable arising from the sales of goods or services in the Ordinary Course of Business;

(d) Permitted Cash Equivalent Investments;

(e) (i) Investments consisting of 100% of the ownership of the Equity Interests of its Subsidiaries, (ii) intercompany Investments by Borrower or a Subsidiary in any Guarantor or (iii) Investments by Borrower or any Subsidiary acquired in connection with a Permitted Acquisition;

(f) Hedging Agreements entered into in the ordinary course of any Obligor's financial planning solely to hedge interest rate risks (and not for speculative purposes) in respect of Permitted Indebtedness and in aggregate amount for all such Hedging Agreements not in excess of \$500,000;

(g) Investments consisting of prepaid expenses, negotiable instruments held for collection or deposit, security deposits with utilities, landlords and other like Persons, and deposits in connection with workers' compensation and similar deposits, in each case made in the Ordinary Course of Business;

(h) Investments received in connection with any Insolvency Proceedings in respect of any customers, suppliers or clients and in settlement of delinquent obligations of, and other disputes with, customers, suppliers or clients;

(i) Investments permitted under Section 9.01(e) and Section 9.03;

(j) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the Ordinary Course of Business;

(k) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board in an aggregate amount not to exceed \$100,000 for subclauses (i) and (ii) in any fiscal year;

(l) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, Investments in Immaterial Foreign Subsidiaries in an aggregate amount not to exceed \$250,000 in any fiscal year; and

(m) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, other Investments in an amount not to exceed \$100,000 in any fiscal year.

Section 9.06. Restricted Payments. It will not, and will not permit any of its Subsidiaries to, declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment, other than:

- (a) dividends and stock splits with respect to any Equity Interests of Borrower or any of its Subsidiaries payable solely in additional shares of its Qualified Equity Interests;
- (b) any Restricted Payment by a Subsidiary to Borrower;
- (c) any purchase, redemption, retirement, or other Acquisition by Borrower or any of its Subsidiaries of shares of its capital stock or other Equity Interests with the proceeds received from a substantially concurrent issue of new shares of its capital stock or other Equity Interests;
- (d) dividends paid by any Guarantor to any other Obligor;
- (e) cashless exercises of options and warrants;
- (f) repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, or similar plans in an aggregate amount not to exceed \$100,000 in any fiscal year;
- (g) the making of cash payments in lieu of the issuance of fractional shares upon the conversion of convertible securities (or in connection with the exercise of warrants or similar securities) not to exceed \$25,000 in any fiscal year; and
- (h) the issuance of the Warrant Certificate and cash payments made to redeem, purchase, repurchase or retire the Warrant Obligations in accordance with the terms of the Warrant Certificate.

Section 9.07. Payments of Indebtedness. It will not, and will not permit any of its Subsidiaries to, make any payments in respect of any Material Indebtedness other than (i) payments of the Obligations and (ii) so long as no Default has occurred and is continuing or would result therefrom, scheduled payments of other Permitted Indebtedness and, in the case of repayment of intercompany Indebtedness permitted in reliance upon Section 9.01(e), subject to any subordination agreement entered into in connection therewith.

Section 9.08. Change in Fiscal Year. It will not, and will not permit any of its Subsidiaries to, change the last day of its fiscal year from that in effect on the date hereof, without prior written notice to the Administrative Agent, except to change the fiscal year of a Subsidiary acquired in connection with a Permitted Acquisition to conform its fiscal year to that of Borrower.

Section 9.09. Sales of Assets, Etc. It will not, and will not permit any of its Subsidiaries to, sell, lease, exclusively license (in terms of geography or field of use), as a licensor, transfer (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws) or otherwise dispose of any of its Property (including accounts receivable and Equity Interests of Subsidiaries), or forgive, release or compromise any amount owed to any Obligor or any of its Subsidiaries, in each case, in one transaction or series of transactions (any thereof, an "Asset Sale"), except:

- (a) transfers of cash in the Ordinary Course of Business for equivalent value;
- (b) sales or leases of products and services in the Ordinary Course of Business on ordinary business terms;
- (c) the forgiveness, release or compromise of any amount owed to any Obligor in the Ordinary Course of Business;
- (d) entering into, or becoming bound, by a Permitted License to the extent not otherwise prohibited by this Agreement;
- (e) development and other collaborative arrangements where such arrangements provide for the license or disclosure of Patents, Trademarks, Copyrights or other Intellectual Property rights of any Obligor in the Ordinary Course of Business and consistent with general market practices where such license requires periodic payments based on per unit sales of a product over a period of time; *provided* that such licenses must be true licenses that do not result in a legal transfer of title of the licensed Property or otherwise constitute sales transactions in substance,;
- (f) a sale, lease, exclusive license, transfer or other disposition (including by way of abandonment, cancellation or trade-in) of any Property that is obsolete, worn out, surplus or no longer used or useful in connection with the business of the Obligors or with respect to which a newer and improved version is available;
- (g) dispositions resulting from Casualty Events;
- (h) any transaction permitted under Section 9.02, 9.03, 9.05 and 9.20; and
- (i) so long as no Default shall have occurred and is continuing at the time of such Asset Sale, or after giving effect thereto, Asset Sales of other property not to exceed \$250,000 in the aggregate per fiscal year.

Section 9.10. Transactions with Affiliates. It will not, and will not permit any of its Subsidiaries to, sell, lease, license or otherwise transfer any assets to, or purchase, lease, license or otherwise acquire any assets from, or otherwise engage in any other transactions with, any of its Affiliates, except:

- (a) transactions between or among the Obligors;

- (b) any transaction permitted under Section 9.01, 9.05, 9.06 or 9.09;
- (c) customary compensation and indemnification of, and other employment arrangements with, directors, officers and employees of any Obligor in the Ordinary Course of Business;
- (d) transactions upon fair and reasonable terms that are no less favorable to any Obligor than would be obtained in a comparable arm's-length transaction with a Person not an Affiliate;
- (e) the transactions set forth on Schedule 9.10; and
- (f) cash equity contributions by Borrower's investors in Borrower or its Subsidiaries (other than Disqualified Equity Interests).

Section 9.11. Restrictive Agreements. It will not, and will not permit any of its Subsidiaries to, directly or indirectly, enter into, incur or permit to exist any Restrictive Agreement other than (i) restrictions and conditions imposed by Law or by the Loan Documents, (ii) Restrictive Agreements listed on Schedule 7.15, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor or (iv) limitations associated with Permitted Liens or with any transaction permitted under Section 9.01, 9.03, 9.05, 9.06 or 9.09.

Section 9.12. Organizational Documents, Material Agreements. (a) It will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of any Organizational Document that would be reasonably expected to adversely affect the Lenders in any material respect, without the prior written consent of the Administrative Agent.

(b) It will not, and will not permit any of its Subsidiaries to (i) enter into any material waiver, amendment or modification of any Material Agreement (including, but not limited to, any amendments to provisions relating to pricing and term) that would be reasonably expected to adversely affect the Lenders in any material respect or (ii) take or omit to take any action that results in the termination of, or permits any other Person to terminate, any Material Agreement or Material Intellectual Property that would be reasonably expected to adversely affect the Lenders in any material respect, without, in each case, the prior written consent of the Administrative Agent.

Section 9.13. Operating Leases. It will not, and will not permit any of its Subsidiaries to, make any expenditures in respect of operating leases, except for:

- (a) real estate operating leases entered into in the Ordinary Course of Business; and
- (b) operating leases that would not cause the Obligors, on a consolidated basis, to make payments exceeding \$500,000 in any fiscal year.

Section 9.14. Sales and Leasebacks. Except as permitted by Section 9.01(g), it will not, and will not permit any of its Subsidiaries to, become liable, directly or indirectly, with respect to any lease, whether an operating lease or a Capital Lease Obligation, of any Property (whether real, personal, or mixed), whether now owned or hereafter acquired, which (i) any Obligor has sold or transferred or is to sell or transfer to any other Person and (ii) any Obligor intends to use for substantially the same purposes as Property which has been or is to be sold or transferred.

Section 9.15. Hazardous Material. It will not, and will not permit any of its Subsidiaries to, use, generate, manufacture, install, treat, release, store or dispose of any Hazardous Material, except in compliance with all applicable Environmental Laws or where the failure to comply would not reasonably be expected to result in a Material Adverse Change.

Section 9.16. Accounting Changes. It will not, and will not permit any of its Subsidiaries to, make any significant change in accounting treatment, except as required or permitted by GAAP.

Section 9.17. Compliance with ERISA. No ERISA Affiliate shall cause or suffer to exist (a) any event that would result in the imposition of a Lien with respect to any Title IV Plan or Multiemployer Plan or (b) any other ERISA Event that would, in the aggregate, have a Material Adverse Effect. No Obligor or any Subsidiary thereof shall cause or suffer to exist any event that could result in the imposition of a Lien with respect to any Benefit Plan that would have a Material Adverse Effect.

Section 9.18. Deposit Accounts. It will not, and will not permit any of its Subsidiaries to, establish or maintain any bank account that is not a Controlled Account (other than an Excluded Account) and will not, and will not permit any of its Subsidiaries to, deposit proceeds in a bank account that is not a Controlled Account; *provided*, up to two (2) months of payroll expenses may be on deposit in Excluded Accounts in the aggregate at any time.

Section 9.19. Outbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any outbound license or agreement unless such outbound license or agreement is a Permitted License.

Section 9.20. Inbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any inbound license or agreement (other than Permitted Licenses) unless (i) no Default has occurred and is continuing, (ii) such Obligor has provided written notice to the Administrative Agent of the material terms of such license or agreement with a description of its anticipated and projected impact on such Obligor's business or financial condition, and (iii) such Obligor has taken such commercially reasonable actions as the Administrative Agent may reasonably request to obtain the consent of, or waiver by, any Person whose consent or waiver is necessary for the Administrative Agent to be granted a valid and perfected security interest in such license or agreement allowing the Administrative Agent to fully exercise its rights under any of the Loan Documents in the event of a disposition or liquidation of the rights, assets or property that is the subject of such license or agreement; *provided* that the aggregate

amounts to be paid under all such inbound licenses pursuant to this Section 9.20 shall not exceed an amount equal to \$1,000,000 per fiscal year.

ARTICLE 10

EVENTS OF DEFAULT

Section 10.01. Events of Default. Each of the following events shall constitute an “Event of Default”:

(a) Borrower shall fail to pay any principal on the Loan when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise; or

(b) any Obligor shall fail to pay any Obligation (other than an amount referred to in Section 10.01(a)) when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three (3) Business Days; or

(c) any representation or warranty made by or on behalf of an Obligor or any of its Subsidiaries in or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, shall: (i) prove to have been incorrect when made or deemed made to the extent that such representation or warranty contains any materiality or Material Adverse Effect qualifier; or (ii) prove to have been incorrect in any material respect when made or deemed made to the extent that such representation or warranty does not otherwise contain any materiality or Material Adverse Effect qualifier; or

(d) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in Sections 8.01, 8.02, 8.03(a) (with respect to such Obligor’s existence), 8.10, 8.11, 8.13, 8.15, 8.17, 8.18, 8.19 or Article 9; or

(e) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in Section 10.01(a), (b) or (d)) or any other Loan Document, and, in the case of any failure that is capable of cure, such failure shall continue unremedied for a period of thirty (30) or more days; or

(f) any Obligor shall fail to make any payment in respect of any Material Indebtedness, when and as the same shall become due and payable after giving effect to any applicable grace or cure period as originally provided by the terms of such Indebtedness; or

(g) (i) any material breach of, or “event of default” or similar event under, the Contract governing any Material Indebtedness shall occur and such breach or “event of default” or similar event shall continue unremedied, uncured or unwaived after a period of five (5) Business Days after the expiration of any cure period thereunder, or (ii) any event or condition occurs (A) that results in any Material Indebtedness becoming due prior to its scheduled maturity or (B) that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of such Material Indebtedness or any trustee or agent on its or their behalf to cause such Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; *provided* that this Section 10.01(h) shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the Property securing such Material Indebtedness; or

(h) any Obligor or any of its Subsidiaries:

(i) ceases to be Solvent, or generally does not or becomes unable to pay its debts or meet its liabilities as the same become due, or admits in writing its

inability to pay its debts generally, or declares any general moratorium on its indebtedness, or proposes a compromise or arrangement or deed of company arrangement between it and any class of its creditors; or

(ii) shall (A) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (B) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in Section 10.01(i), (C) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or for a substantial part of its assets, (D) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (E) make a general assignment for the benefit of creditors or (F) take any action for the purpose of effecting any of the foregoing; or

(i) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of an Obligor or any Subsidiary of an Obligor or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or any Subsidiary of an Obligor or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for sixty (60) days or an order or decree approving or ordering any of the foregoing shall be entered; or

(j) one or more judgments for the payment of money in an aggregate amount in excess of \$250,000 (excluding any amounts covered by insurance as to which the applicable carrier has accepted coverage) shall be rendered against any Obligor or any combination thereof and the same shall remain undischarged for a period of forty-five (45) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of any Obligor to enforce any such judgment; or

(k) an ERISA Event shall have occurred that, when taken together with all other ERISA Events that have occurred, would reasonably be expected to result in liability of the Obligor and their Subsidiaries in an aggregate amount exceeding (i) \$250,000 in any year or (ii) \$500,000 for all periods until repayment of all Obligations (other than the Warrant Obligations); or

(l) a Change of Control shall have occurred; or

(m) a Material Adverse Change shall have occurred; or

(n) (i) any Lien created by any of the Security Documents shall at any time not constitute a valid and perfected Lien in favor of the Administrative Agent on Collateral with an aggregate value in excess of \$250,000, free and clear of all other Liens (other than

Permitted Liens) except due to the action or inaction of the Administrative Agent or any Lender(s), (ii) except as permitted herein the Security Documents or any Guarantee of any of the Obligations shall for whatever reason cease to be in full force and effect, or (iii) any of the Security Documents or any Guarantee of any of the Obligations, or the enforceability thereof, shall be repudiated or contested by any Obligor.

Section 10.02. Remedies. (a) Upon the occurrence of any Event of Default, then, and in every such event (other than an Event of Default described in Section 10.01(h) or (i)), and at any time thereafter during the continuance of such event, the Majority Lenders may, by notice to Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other Obligations, shall become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(b) Upon the occurrence of any Event of Default described in Section 10.01(h) or (i), the Commitments shall automatically terminate and the principal amount of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations, shall automatically become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(c) If any Lender collects any money or property pursuant to this Article 10, they shall pay out the money or property in the order set forth in Section 4.01(b).

Section 10.03. Prepayment Premium and Redemption Price. For the avoidance of doubt, any Prepayment Premium (as a component of the Redemption Price) shall be due and payable at any time the Loans become due and payable prior to the Stated Maturity Date for any reason, whether due to acceleration pursuant to the terms of this Agreement (in which case it shall be due immediately, upon the giving of notice to Borrower in accordance with Section 10.02(a), or automatically, in accordance with Section 10.02(b)), by operation of law or otherwise (including, without limitation, on account of any bankruptcy filing), except as otherwise specified herein. In view of the impracticability and extreme difficulty of ascertaining the actual amount of damages to the Lenders or profits lost by the Lenders as a result of such acceleration, and by mutual agreement of the parties as to a reasonable estimation and calculation of the lost profits or damages of the Lenders, any Prepayment Premium shall be due and payable upon such date. Each Obligor hereby waives any defense to payment, whether such defense may be based in public policy, ambiguity, or otherwise. The Obligor and the Lenders acknowledge and agree that any Prepayment Premium due and payable in accordance with this Agreement shall not constitute unmatured interest, whether under Section 502(b)(3) of the Bankruptcy Code or otherwise. Each Obligor further acknowledges and agrees, and waives any argument to the contrary, that payment of such amount does not constitute a penalty or an otherwise unenforceable or invalid obligation.

ARTICLE 11

GUARANTEE

Section 11.01. The Guarantee. The Guarantors hereby jointly and severally guarantee to the Administrative Agent and each Lender, and its successors and assigns, the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the principal of and interest on the Loans, all fees and other amounts and Obligations from time to time owing to the Administrative Agent and any Lender by Borrower under this Agreement or under any other Loan Document and by any other Obligor under any of the Loan Documents, in each case strictly in accordance with the terms thereof (such obligations being herein collectively called the “Guaranteed Obligations”). The Guarantors hereby further jointly and severally agree that if Borrower shall fail to pay in full when due (whether at stated maturity, by acceleration or otherwise) any of the Guaranteed Obligations, the Guarantors will promptly pay the same, without any demand or notice whatsoever, and that in the case of any extension of time of payment or renewal of any of the Guaranteed Obligations, the same will be promptly paid in full when due (whether at extended maturity, by acceleration or otherwise) in accordance with the terms of such extension or renewal.

Section 11.02. Obligations Unconditional. The obligations of the Guarantors under Section 11.01 are absolute and unconditional, joint and several, irrespective of the value, genuineness, validity, regularity or enforceability of the obligations of Borrower under this Agreement or any other agreement or instrument referred to herein, or any substitution, release or exchange of any other guarantee or security for any of the Guaranteed Obligations, and, to the fullest extent permitted by applicable Law, irrespective of any other circumstance whatsoever that might otherwise constitute a legal or equitable discharge or defense of a surety or Guarantor, it being the intent of this Section 11.02 that the obligations of the Guarantors hereunder shall be absolute and unconditional, joint and several, under any and all circumstances. Without limiting the generality of the foregoing, it is agreed that the occurrence of any one or more

of the following shall not alter or impair the liability of the Guarantors hereunder, which shall remain absolute and unconditional as described above:

(a) at any time or from time to time, without notice to the Guarantors, the time for any performance of or compliance with any of the Guaranteed Obligations shall be extended, or such performance or compliance shall be waived;

(b) any of the acts mentioned in any of the provisions of this Agreement or any other agreement or instrument referred to herein shall be done or omitted;

(c) the maturity of any of the Guaranteed Obligations shall be accelerated, or any of the Guaranteed Obligations shall be modified, supplemented or amended in any respect, or any right under this Agreement or any other agreement or instrument referred to herein shall be waived or any other guarantee of any of the Guaranteed Obligations or any security therefor shall be released or exchanged in whole or in part or otherwise dealt with; or

(d) any lien or security interest granted to, or in favor of, any Lender as security for any of the Guaranteed Obligations shall fail to be perfected.

The Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that the Administrative Agent or any Lender exhaust any right, power or remedy or proceed against Borrower under this Agreement or any other agreement or instrument referred to herein, or against any other Person under any other guarantee of, or security for, any of the Guaranteed Obligations.

Section 11.03. Reinstatement. The obligations of the Guarantors under this Article 11 shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of Borrower in respect of the Guaranteed Obligations is rescinded or must be otherwise restored by any holder of any of the Guaranteed Obligations, whether as a result of any proceedings in bankruptcy or reorganization or otherwise, and the Guarantors jointly and severally agree that they will indemnify the Administrative Agent and each Lender on demand for all reasonable out-of-pocket costs and expenses (including reasonable fees of counsel) incurred by such Persons in connection with such rescission or restoration, including any such reasonable out-of-pocket costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any bankruptcy, insolvency or similar Law.

Section 11.04. Subrogation. The Guarantors hereby jointly and severally agree that, until the payment and satisfaction in full of all Guaranteed Obligations (other than the Warrant Obligations) and the expiration and termination of the Commitments, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in Section 11.01, whether by subrogation or otherwise, against Borrower or any other guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations.

Section 11.05. Remedies. The Guarantors jointly and severally agree that, as between the Guarantors, on one hand, and the Lenders, on the other hand, the obligations of Borrower under this Agreement and under the other Loan Documents may be declared to be forthwith due and payable as provided in Article 10 (and shall be deemed to have become automatically due and payable in the circumstances provided in Article 10) for purposes of Section 11.01 notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Borrower and that, in the event of such declaration (or such obligations being deemed to have become automatically due and payable), such obligations (whether or not due and payable by Borrower) shall forthwith become due and payable by the Guarantors for purposes of Section 11.01.

Section 11.06. Instrument for the Payment of Money. Each Guarantor hereby acknowledges that the guarantee in this Article 11 constitutes an instrument for the payment of money, and consents and agrees that each Lender, at its sole option, in the event of a dispute by such Guarantor in the payment of any moneys due hereunder, shall have the right to proceed by motion for summary judgment in lieu of complaint pursuant to N.Y. Civ. Prac. L&R § 3213.

Section 11.07. Continuing Guarantee. The guarantee in this Article 11 is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

Section 11.08. Rights of Contribution. The Guarantors hereby agree, as between themselves, that if any Guarantor shall become an Excess Funding Guarantor (as defined below) by reason of the payment by such Guarantor of any Guaranteed Obligations, each other Guarantor shall, on demand of such Excess Funding Guarantor (but subject to the next sentence), pay to such Excess Funding Guarantor an amount equal to such Guarantor's Pro Rata Share (as defined below and determined, for this purpose, without reference to the properties, debts and liabilities of such Excess Funding Guarantor) of the Excess Payment (as defined below) in respect of such Guaranteed Obligations. The payment obligation of a Guarantor to any Excess Funding Guarantor under this Section 11.08 shall be subordinate and subject in right of payment to the prior payment in full of the obligations of such Guarantor under the other provisions of this Article 11 and such Excess Funding Guarantor shall not exercise any right or remedy with respect to such excess until payment and satisfaction in full of all of such obligations.

For purposes of this Section 11.08, (i) "Excess Funding Guarantor" means, in respect of any Guaranteed Obligations, a Guarantor that has paid an amount in excess of its Pro Rata Share of such Guaranteed Obligations, (ii) "Excess Payment" means, in respect of any Guaranteed Obligations, the amount paid by an Excess Funding Guarantor in excess of its Pro Rata Share of such Guaranteed Obligations and (iii) "Pro Rata Share" means, as of the date of determination, for any Guarantor, the ratio (expressed as a percentage) of (x) the amount by which the aggregate present fair saleable value of all properties of such Guarantor (excluding any shares of stock of any other Guarantor) exceeds the amount of all the debts and liabilities of such Guarantor (including contingent, subordinated, unmaturing and unliquidated liabilities, but excluding the obligations of such Guarantor hereunder and any obligations of

any other Guarantor that have been Guaranteed by such Guarantor) to (y) the amount by which the aggregate fair saleable value of all properties of all of the Guarantors exceeds the amount of all the debts and liabilities (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of Borrower and the Guarantors hereunder and under the other Loan Documents) of all of the Guarantors, determined (A) with respect to any Guarantor that is a party hereto on the Closing Date, as of such date, and (B) with respect to any other Guarantor, as of the date such Guarantor becomes a Guarantor hereunder.

Section 11.09. General Limitation on Guarantee Obligations. In any action or proceeding involving any provincial, territorial or state corporate law, or any state or federal bankruptcy, insolvency, reorganization or other Law affecting the rights of creditors generally, if the obligations of any Guarantor under Section 11.01 would otherwise, taking into account the provisions of Section 11.08, be held or determined to be void, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under Section 11.01, then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Guarantor, the Administrative Agent, the Lenders or any other Person, be automatically limited and reduced to the highest amount that is valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding.

ARTICLE 12

ADMINISTRATIVE AGENT

Section 12.01. Appointment. Each of the Lenders hereby irrevocably appoints Perceptive to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article 12 are solely for the benefit of the Administrative Agent and the Lenders, and neither Borrower nor any other Obligor will have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead, such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

Section 12.02. Rights as a Lender. The Person serving as the Administrative Agent hereunder will have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent, and the term “Lender” or “Lenders” will, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity to the extent such Person is a Lender. The Lenders acknowledge and agree that such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, Borrower, the other Obligors or any other Subsidiaries or Affiliates of the Obligors as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

Section 12.03. Exculpatory Provisions. (a) The Administrative Agent will not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder are administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

(i) will not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(ii) will not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Majority Lenders (or such other number or percentage of the Lenders as will be expressly provided for herein or in the other Loan Documents); *provided* that the Administrative Agent will not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including any action that may be in violation of the automatic stay under any Insolvency Proceeding; and

(iii) will not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and will not be liable for the failure to disclose, any information relating to the Obligors or any of its Subsidiaries or Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(b) The Administrative Agent will not be liable for any action taken or not taken by it (i) with the consent or at the request of the Majority Lenders (or such other number or percentage of the Lenders as will be necessary, or as the Administrative Agent believes in good faith will be necessary, under the circumstances), or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and non-appealable judgment. The Administrative Agent will be deemed not to have knowledge of any Default unless and until notice describing such Default is given to the Administrative Agent in writing by Borrower or a Lender.

(c) The Administrative Agent will not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other

agreement, instrument or document or (v) the satisfaction of any condition set forth in Article 6 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

Section 12.04. Reliance by Administrative Agent. The Administrative Agent will be entitled to rely upon, and will not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and will not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of the Loans that by its terms must be fulfilled to the satisfaction of a Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender unless the Administrative Agent has received notice to the contrary from such Lender prior to the making of such Loans. The Administrative Agent may consult with legal counsel (who may be counsel for Borrower), independent accountants and other experts selected by it, and will not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

Section 12.05. Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Affiliates. The exculpatory provisions of this Section will

apply to any such sub-agent and to the Affiliates of the Administrative Agent and any such sub-agent, and will apply to their respective activities in connection with the syndication of the facility as well as activities as Administrative Agent. The Administrative Agent will not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and non-appealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

Section 12.06. Resignation of Agent. (a) The Administrative Agent may at any time give notice of its resignation to the Lenders and Borrower, which notice shall set forth the effective date of such resignation (the “*Resignation Effective Date*”), such date not to be earlier than the thirtieth (30th) day following the date of such notice. The Majority Lenders and Borrower shall mutually agree upon a successor to the Administrative Agent. If the Majority Lenders and Borrower are unable to so mutually agree and no successor shall have been appointed within twenty-five (25) days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may (but will not be obligated to), on behalf of the Lenders, appoint a successor Administrative Agent it shall designate (in its reasonable discretion after consultation with Borrower and the Majority Lenders). Whether or not a successor has been appointed, such resignation will become effective in accordance with such notice on the Resignation Effective Date.

(b) With effect from the Resignation Effective Date (i) the retiring Administrative Agent will be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any Collateral held by the Administrative Agent on behalf of the Lenders under any of the Loan Documents, the retiring Administrative Agent will continue to hold such Collateral until such time as a successor Administrative Agent is appointed) and (ii) except for any indemnity payments owed to the retiring Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent will instead be made by or to each Lender directly, until such time, if any, as the Majority Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor’s appointment as Administrative Agent hereunder, such successor will succeed to and become vested with all of the rights, powers, privileges and duties of the retiring Administrative Agent (other than any rights to indemnity payments owed to the retiring Administrative Agent), and the retiring Administrative Agent will be discharged from all of its duties and obligations hereunder or under the other Loan Documents. The fees payable by Borrower to a successor Administrative Agent will be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the retiring Administrative Agent’s resignation hereunder and under the other Loan Documents, the provisions of this Article 12 and Sections 13.03 and 13.06 will continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Affiliates in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

Section 12.07. Non-Reliance on Administrative Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative

Agent or any other Lender or any of their Affiliates and based on such documents and information as it will from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

Section 12.08. Administrative Agent May File Proofs of Claim. In case of the pendency of any Insolvency Proceeding or any other judicial proceeding relative to Borrower, the Administrative Agent (irrespective of whether the principal of the Loans will then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent has made any demand on Borrower) will be entitled and empowered (but not obligated), by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans and all other Obligations that are owing and unpaid hereunder or under any other Loan Document and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and the Administrative Agent and their respective agents and counsel and all other amounts due the Lenders and the Administrative Agent under this Agreement or any other Loan Document) allowed in such judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same.

Any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make any payments of the type described above in this Section 12.08 to the Administrative Agent and, in the event that the Administrative Agent consents to the making of such payments directly to the Lenders, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under this Agreement or any other Loan Document.

Section 12.09. Collateral and Guaranty Matters; Appointment of Administrative Agent. (a) Without limiting the provisions of Section 12.08, the Lenders irrevocably agree as follows:

(i) the Administrative Agent is authorized, at its option and in its discretion, to release any Lien on any property granted to or held by the Administrative Agent under any Loan Document (A) on the date when all Obligations have been satisfied in full in cash (other than Warrant Obligations and contingent obligations as to which no claims have been asserted), (B) that is sold or otherwise disposed of or to be sold or otherwise disposed of as part of or in connection with any sale or other disposition permitted under the Loan Documents, or (C) subject to Sections 13.01 and 13.04, if approved, authorized or ratified in writing by the Majority Lenders; and

(ii) the Administrative Agent is authorized, at its option and discretion, to release any Guarantor from its obligations hereunder if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Loan Documents.

Upon request by the Administrative Agent at any time, each Lender will confirm in writing the Administrative Agent's authority to release or subordinate its interest in particular types or items of Collateral, or to release any Guarantor from its obligations under its guaranty pursuant to this Section 12.09.

(b) The Administrative Agent will not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Administrative Agent's Lien thereon, or any certificate prepared by any Obligor in connection therewith, nor will the Administrative Agent be responsible or liable to the Lenders for any failure to monitor or maintain any portion of the Collateral.

(c) Each Lender hereby appoints the Administrative Agent as its collateral agent under each of the Security Documents and agrees that, in so acting, the Administrative Agent will have all of the rights, protections, exculpations, indemnities and other benefits provided to the Administrative Agent under this Agreement, and hereby authorizes and directs the Administrative Agent, on behalf of such Lender and all Lenders, without the necessity of any notice to or further consent from any of the Lenders, from time to time to (i) take any action with respect to any Collateral or any Security Document which may be necessary to perfect and maintain perfected the Liens on the Collateral granted pursuant to any such Security Document or protect and preserve the Administrative Agent's ability to enforce the Liens or realize upon the Collateral, (ii) act as collateral agent for each Lender for purposes of acquiring, holding, enforcing and perfecting all Liens created by the Loan Documents and all other purposes stated therein, (iii) enter into intercreditor or subordination agreements, as the case may be, in connection with Indebtedness permitted pursuant to Sections 9.01(e) and 9.01(l), as applicable, (iv) enter into non-disturbance or similar agreements in connection with licensing agreements and arrangements permitted by this Agreement and the other Loan Documents and (v) otherwise to take or refrain from taking any and all action that the Administrative Agent shall deem necessary or advisable in fulfilling its role as collateral agent under any of the Security Documents.

ARTICLE 13

MISCELLANEOUS

Section 13.01. No Waiver. No failure on the part of the Administrative Agent or the Lenders to exercise and no delay in exercising, and no course of dealing with respect to, any right, power or privilege under any Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege under any Loan Document preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The remedies provided herein are cumulative and not exclusive of any remedies provided by Law.

Section 13.02. Notices. All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, the Loan Documents) shall be given or made in writing (including by telecopy or electronic mail) delivered, if to Borrower, another Obligor, the Administrative Agent or the Lenders, to its address specified on Schedule 2 hereto or its Guarantee Assumption Agreement, as the case may be, or at such other address as shall be designated by such party in a notice to the other parties. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given upon receipt of a legible copy thereof, in each case given or addressed as aforesaid.

Section 13.03. Expenses, Indemnification .

(a) *Expenses.* Borrower agrees to pay or reimburse (i) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket costs and expenses (including the reasonable fees and expenses of Chapman and Cutler LLP, counsel to the Administrative Agent) in connection with (x) the negotiation, preparation, execution and delivery of this Agreement and the other Loan Documents and the making of the Loans (exclusive of post-closing costs); *provided* that, so long as the Borrowing of the Tranche A Loan is made, such fees shall be credited against the Expense Deposit paid by Borrower, (y) post-closing costs and (z) the negotiation or preparation of any amendment, modification, supplement or waiver of any of the terms of this Agreement or any of the other Loan Documents (whether or not consummated) and (ii) the Administrative Agent and the Lenders for all of their reasonable

and documented out of pocket costs and expenses (including the reasonable fees and expenses of legal counsel) in connection with any enforcement or collection proceedings resulting from the occurrence of an Event of Default.

(b) *Indemnification.* Each Obligor hereby indemnifies the Administrative Agent, the Lenders, their respective Affiliates, and their respective directors, officers, employees, attorneys, agents and advisors (each, an “*Indemnified Party*”) from and against, and agrees to hold them harmless against, any and all Claims and Losses of any kind (including reasonable fees and disbursements of counsel), joint or several, that is incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to any investigation, litigation or proceeding or the preparation of any defense with respect thereto arising out of or in connection with or relating to this Agreement or any of the other Loan Documents or the Transactions or any use made or proposed to be made with the proceeds of the Loans, whether or not such investigation, litigation or proceeding is brought by an Obligor, any of its shareholders or creditors, an Indemnified Party or any other Person, or an Indemnified Party is otherwise a party thereto, and whether or not any of the conditions precedent set forth in Article 6 are satisfied or the other Transactions contemplated by this Agreement are consummated, except to the extent such Claim or Loss is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from any Indemnified Party’s gross negligence or willful misconduct. No Obligor shall assert any claim against any Indemnified Party, on any theory of liability, for consequential, indirect, special or punitive damages arising out of or otherwise relating to this Agreement or any of the other Loan Documents or any of the Transactions or the actual or proposed use of the proceeds of the Loans. This Section shall not apply to Taxes other than Taxes relating to a non-Tax Claim or Loss governed by this Section 13.03(b).

Section 13.04. Amendments. Except as otherwise expressly provided in this Agreement, any provision of this Agreement or any other Loan Document (except for the Warrant Certificate, which may be amended, modified, waived or supplemented in accordance with the terms thereof) may be amended, modified, waived or supplemented only by an instrument in writing signed by Borrower, the Administrative Agent and the Majority Lenders; *provided that:*

(a) no amendment, waiver or consent shall, unless in writing and signed by all of the Lenders, do any of the following at any time:

(i) change the percentage of (x) the Commitments or (y) the aggregate unpaid principal amount of the Loans that, in each case, shall be required for the Lenders or any of them to take any action hereunder (including pursuant to any change to the definition of “*Majority Lenders*”);

(ii) release one or more Guarantors (or otherwise limit such Guarantors’ liability with respect to the Obligations owing to the Lenders under the Guarantees) if such release or limitation is in respect of all or substantially all of the value represented by the Guarantees to the Lenders;

(iii) release, or subordinate the Lenders’ Liens in, all or substantially all of the Collateral in any transaction or series of related transactions (other than in connection with any sale of Collateral permitted herein); or

(iv) amend any provision of this Section 13.04;

(b) no amendment, waiver or consent shall, unless in writing and signed by each Lender specified below for such amendment, waiver or consent:

(i) increase the Commitments of a Lender without the consent of such Lender;

(ii) reduce the principal of, or stated rate of interest on, or any Prepayment Premium payable on, the Loans owed to a Lender or any fees or other amounts stated to be payable hereunder or under the other Loan Documents to such Lender without the consent of such Lender;

(iii) postpone any date scheduled for any payment of principal of, or interest on, the Loans, any date scheduled for payment or for any date fixed for any payment of fees hereunder (excluding the due date of any mandatory prepayment of a Loan), in each case payable to a Lender without the consent of such Lender;

(iv) change the order of application of prepayment of the Loans from the application thereof set forth in the applicable provisions of Section 4.01(b)(ii) in any manner that adversely affects the Lenders without the consent of holders of a majority of the Commitments or Loans outstanding or otherwise change any

provision requiring the pro rata distributions hereunder among the Lenders without all Lenders’ consent; or

(v) modify Section 2.02 without the consent of each Lender directly and adversely affected thereby.

Section 13.05. Successors and Assigns.

(a) *General.* The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that (i) no Obligor may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender (and any attempted assignment or transfer by such Obligor without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants (to the extent provided in paragraph (e) of this Section) and, to the extent expressly contemplated hereby, the Indemnified Parties of the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) *Amendments to Loan Documents; Majority Lender Vote.* Each of the Lenders and the Obligors agrees to enter into such amendments to the Loan Documents, and such additional Security Documents and other instruments and agreements, in each case in form and substance reasonably acceptable to the Lenders and the Obligors, as shall reasonably be necessary to implement and give effect to any assignment made by any Lender (or any direct or indirect assignee thereof) from time to time under this Section 13.05.

(c) *Assignments by Lenders.* (i) Subject to the conditions set forth in paragraph (c)(ii) below, any Lender may assign to one or more Persons (other than an Ineligible Assignee) all or a portion of its rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld) of the Administrative Agent, provided that no consent of the Administrative Agent shall be required for an assignment of any Commitment or of all or any portion of a Loan to a Lender, an Affiliate of a Lender or an Approved Fund.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender or an Affiliate of a Lender or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment Agreement with respect to such assignment is delivered to the Administrative Agent) shall not be less than \$500,000, unless the Administrative Agent otherwise consents;

(B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement and the other Loan Documents; and

(C) the parties to each assignment shall execute and deliver to the Administrative Agent (with a copy to the Borrower, *provided* that the failure to give such copy to the Borrower shall not affect the validity of such Assignment Agreement) an Assignment Agreement in form and substance reasonably satisfactory to Administrative Agent.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (d) of this Section, from and after the effective date specified in each Assignment Agreement, the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment Agreement, have the rights and obligations of a Lender under the Loan Documents, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment Agreement, be released from its obligations under the Loan Documents (and, in the case of an Assignment Agreement covering all of the assigning Lender's rights and obligations under the Loan Documents, such Lender shall cease to be a party hereto). Any assignment or transfer by a Lender of rights or obligations under the Loan Documents that does not comply with this Section 13.05 shall be treated for purposes of the Loan Documents as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (e) of this Section.

(d) *Register.* The Administrative Agent, acting for this purpose as a non-fiduciary agent of Borrower, shall maintain at one of its offices a copy of each Assignment Agreement delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "*Register*"). The entries in the Register shall be conclusive absent manifest error, and Borrower, the Administrative Agent, and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice. No assignment shall be effective for purposes of this Agreement unless (i) it has been recorded in the Register as provided in this paragraph and (ii) any written consent to such assignment required by paragraph (b) of this Section has been obtained.

(e) *Participations.* Any Lender may at any time, without the consent of, or notice to, Borrower, sell participations to any Person (a "*Participant*"), other than an Ineligible Assignee, in all or a portion of such Lender's rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans owing to it); *provided* that (i) such Lender's obligations under the Loan Documents shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) Borrower shall continue to deal solely and directly with such Lender in connection therewith.

(f) Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such

agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver that would (i) increase or extend the term of such Lender's Commitment, (ii) extend the date fixed for the payment of principal or interest on the Loans or any portion of any fee hereunder payable to the Participant, (iii) reduce the amount of any such payment of principal, or (iv) reduce the rate at which interest is payable thereon to a level below the rate at which the Participant is entitled to receive such interest. Borrower agrees that each Participant shall be entitled to the benefits of Section 5.03 (subject to the requirements and limitations therein, including the requirements under Section 5.03(f) (it being understood that the documentation required under Section 5.03(f) shall be delivered to Borrower and the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 13.05(a), *provided* that such Participant (A) agrees to be subject to the provisions of Section 5.03(h) as if it were an assignee under Section 13.05(a); and (B) shall not be entitled to receive any greater payment under Section 5.03, with respect to any participation, than its participating Lender would have been entitled to receive, unless the sale of the participation to such Participant is made with Borrower's prior written consent. To the extent permitted by Law, each Participant also shall be entitled to the benefits of Section 4.04(a) as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "*Participant Register*"); *provided* that no Lender shall have any obligation to disclose all

or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(g) *Certain Pledges.* Subject to Section 13.05(d), the Lenders may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement and any other Loan Document to secure obligations of the Lenders, including any pledge or assignment to secure obligations to a Federal Reserve Bank or another central bank; *provided* that no such pledge or assignment shall release the Lenders from any of their obligations hereunder or substitute any such pledgee or assignee for the Lenders as a party hereto.

Section 13.06. Survival. The obligations of Borrower under Sections 5.01, 5.02, 5.03, 13.03, 13.05, 13.09, 13.10, 13.11, 13.12, 13.13, 13.14 and Article 11 (solely to the extent guaranteeing any of the obligations under the foregoing Sections) shall survive the repayment of the Obligations and the termination of the Commitments and, in the case of any Lender's assignment of any interest in the Commitments or the Loans hereunder, shall survive, in the case of any event or circumstance that occurred prior to the effective date of such assignment, the making of such assignment, notwithstanding that such Lenders may cease to be a "Lender" hereunder. In addition, each representation and warranty made, or deemed to be made by a notice of the Loans, herein or pursuant hereto shall survive the making of such representation and warranty.

Section 13.07. Captions. The table of contents and captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

Section 13.08. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission, electronic transmission (in PDF format) or DocuSign shall be effective as delivery of a manually executed counterpart hereof. The words "execution," "signed," "signature," and words of like import in any Assignment Agreement shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

Section 13.09. GOVERNING LAW. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND THEREUNDER, AND ALL CLAIMS, DISPUTES AND MATTERS ARISING HEREUNDER OR THEREUNDER OR RELATED HERETO OR THERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS EXECUTED IN AND TO BE PERFORMED ENTIRELY WITHIN THAT STATE, WITHOUT REFERENCE TO CONFLICTS OF LAWS PROVISIONS (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW).

Section 13.10. JURISDICTION, SERVICE OF PROCESS AND VENUE.

(a) *SUBMISSION TO JURISDICTION.* EACH OBLIGOR AGREES THAT ANY SUIT, ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT TO WHICH IT IS A PARTY OR ANY JUDGMENT ENTERED BY ANY COURT IN RESPECT THEREOF SHALL BE BROUGHT IN THE SUPREME COURT OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY OR IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK AND IRREVOCABLY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF EACH SUCH COURT FOR THE PURPOSE OF ANY SUCH SUIT, ACTION, PROCEEDING OR JUDGMENT.

(b) *Alternative Process.* Nothing herein shall in any way be deemed to limit the ability of the Lenders to serve any such process or summonses in any other manner permitted by applicable Law.

(c) *WAIVER OF VENUE, ETC.* EACH OBLIGOR IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF THE VENUE OF ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER

LOAN DOCUMENT AND HEREBY FURTHER IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY CLAIM THAT ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. A FINAL JUDGMENT (IN RESPECT OF WHICH TIME FOR ALL APPEALS HAS ELAPSED) IN ANY SUCH SUIT, ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN ANY COURT TO THE JURISDICTION OF WHICH SUCH OBLIGOR IS OR MAY BE SUBJECT, BY SUIT UPON JUDGMENT.

Section 13.11. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

Section 13.12. WAIVER OF IMMUNITY. TO THE EXTENT THAT ANY OBLIGOR MAY BE OR BECOME ENTITLED TO CLAIM FOR ITSELF OR ITS PROPERTY OR REVENUES ANY IMMUNITY ON THE GROUND OF SOVEREIGNTY OR THE LIKE FROM SUIT, COURT JURISDICTION, ATTACHMENT PRIOR TO JUDGMENT, ATTACHMENT IN AID OF

EXECUTION OF A JUDGMENT OR EXECUTION OF A JUDGMENT, AND TO THE EXTENT THAT IN ANY SUCH JURISDICTION THERE MAY BE ATTRIBUTED SUCH AN IMMUNITY (WHETHER OR NOT CLAIMED), SUCH OBLIGOR HEREBY IRREVOCABLY AGREES NOT TO CLAIM AND HEREBY IRREVOCABLY WAIVES SUCH IMMUNITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

Section 13.13. Entire Agreement. This Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Each Obligor acknowledges, represents and warrants that in deciding to enter into this Agreement and the other Loan Documents or in taking or not taking any action hereunder or thereunder, it has not relied, and will not rely, on any statement, representation, warranty, covenant, agreement or understanding, whether written or oral, of or with the Lenders other than those expressly set forth in this Agreement and the other Loan Documents.

Section 13.14. Severability. If any provision hereof is found by a court to be invalid or unenforceable, to the fullest extent permitted by applicable Law the parties agree that such invalidity or unenforceability shall not impair the validity or enforceability of any other provision hereof.

Section 13.15. No Fiduciary Relationship. The Administrative Agent, each Lender and their Affiliates (collectively, solely for purposes of this paragraph, the “Lenders”), may have economic interests that conflict with those of the Obligors, their stockholders and/or their Affiliates (collectively, solely for purposes of this paragraph, the “Obligors”). The Obligors acknowledge that the Lenders have no fiduciary relationship with, or fiduciary duty to, any Obligor arising out of or in connection with this Agreement or the other Loan Documents, and the relationship between

each Lender and each Obligor are solely that of creditors and debtors. This Agreement and the other Loan Documents do not create a joint venture among the parties.

Section 13.16. USA Patriot Act. The Administrative Agent and the Lenders hereby notify the Obligors that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the “Act”) and 31 C.F.R. § 1010.230 (the “Beneficial Ownership Regulation”), they are required to obtain, verify and record information that identifies the Obligors, which information includes the name and address of each Obligor and other information that will allow the Administrative Agent and such Lender to identify each Obligor in accordance with the Act and Beneficial Ownership Regulation, including a beneficial ownership certification in form and substance acceptable to the Administrative Agent.

Section 13.17. Treatment of Certain Information; Confidentiality. The Lenders agree to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed to (a) its Affiliates and to its and its Affiliates’ respective partners, directors, officers, employees, agents, trustees, advisors and representatives (collectively, “Representatives”) (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such Information confidential), (b) to the extent requested by any regulatory authority purporting to have jurisdiction over it (including any self-regulatory authority, such as FINRA or the National Association of Insurance Commissioners) or any exchange, (c) to the extent required by the applicable Laws or by any subpoena or similar legal process, (d) to any other party hereto, (e) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an agreement containing provisions substantially the same as those in this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to Borrower or any Guarantor and its obligation, (g) with the consent of Borrower or (h) to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section or (y) becomes available to the Lender, or any of its respective Representatives on a nonconfidential basis from a source other than Borrower or any other Obligor. For purposes of this Section, “Information” means all information received from an Obligor relating such Obligor or its Subsidiary or any of their respective businesses, except that the term “Information” shall not include, and the Lenders shall not be subject to any confidentiality obligation with respect to any information that (i) is or becomes available to the Lender or any of its Representatives on a nonconfidential basis prior to disclosure by an Obligor or its Subsidiary, (ii) becomes available to a Lender or any of its Representatives after disclosure by Borrower or any other Obligor from a source that, to the knowledge of such Lender, is not subject to a confidentiality obligation to Borrower or such other Obligor (iii) is or becomes publicly available other than as a result of a breach by such Lender, or (iv) is developed by a Lender or any of its Representatives. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

In the case of any Lender that has elected to receive material non-public information pursuant to the last paragraph of Section 8.02, such Lender acknowledges that (a) the Information may include material non-public information concerning an Obligor or its Subsidiary, as the case may be, (b) it has developed compliance procedures regarding the use of material non-public information and (c) it will handle such material non-public information in accordance with applicable Law, including United States federal and state securities Laws.

Section 13.18. Releases of Guarantees and Liens. (a) Notwithstanding anything to the contrary contained herein or in any other Loan Document, each Lender agrees, and the Administrative Agent is hereby irrevocably authorized by each Lender and given a limited power of attorney by each Lender to perform the actions described hereafter in this Section 13.18 (without requirement of notice to or consent of any Lender except as expressly required by Section 13.04) to take any action reasonably requested by Borrower having the effect of releasing any Collateral or Obligations (i) to the extent necessary to permit consummation of any

transaction not prohibited by any Loan Document or that has been consented to by the Lenders or (ii) under the circumstances described in paragraph (b) below.

(b) At such time as the Loans and the other Obligations (other than the inchoate indemnity obligations) under the Loan Documents shall have been paid in full in cash and the Commitments have been terminated, the Collateral shall be released from the Liens created by the Security Documents, and the Security Documents and all obligations (other than those expressly stated to survive such termination) of the Administrative Agent and each Obligor under the Security Documents shall terminate, all without delivery of any instrument or performance of any act by any Person.

Section 13.19. Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it

in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the Applicable Resolution Authority.

[Remainder of the Page Intentionally Left Blank; Signature Pages Follow]

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

BORROWER:

ISOPLEXIS CORPORATION

By: /s/ Sean Mackay

Name: Sean Mackay

Title: President and Chief Executive Officer

[Signature Page to Credit Agreement and Guaranty]

PERCEPTIVE CREDIT HOLDINGS III, LP,
as Administrative Agent and a Lender

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By: /s/ Sandeep Dixit
Name: Sandeep Dixit
Title: Chief Credit Officer

By: /s/ Sam Chawla
Name: Sam Chawla
Title: Portfolio Manager

[Signature Page to Credit Agreement and Guaranty]

FIRST AMENDMENT TO CREDIT AGREEMENT AND GUARANTY

This First Amendment to Credit Agreement and Guaranty (herein, this “*Agreement*”) is entered into as of May 27, 2021 (the “*First Amendment Effective Date*”), by and among IsoPlexis Corporation, a Delaware corporation (the “*Borrower*”), the Lenders party hereto (each a “*Lender*” and collectively, the “*Lenders*”) and Perceptive Credit Holdings III, LP, a Delaware limited partnership, as a lender and as administrative agent for the Lenders (in such capacity, together with its successors and assigns, the “*Administrative Agent*”).

RECITALS:

A. The Lenders have extended credit to the Borrower on the terms and conditions set forth in that certain Credit Agreement and Guaranty, dated as of December 30, 2020 (the “*Existing Credit Agreement*”; the Existing Credit Agreement as amended by this Agreement, the “*Credit Agreement*”).

B. The Borrower has requested that the Administrative Agent and the Lenders agree to amend certain provisions of the Existing Credit Agreement.

C. The parties hereto agree to amend the Existing Credit Agreement pursuant to the terms of this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. *Incorporation of Recitals; Defined Terms.* The parties hereto acknowledge that the Recitals set forth above are true and correct in all material respects. The defined terms in the Recitals set forth above are hereby incorporated into this Agreement by reference. All other capitalized terms used herein without definition shall have the same meanings herein as such terms have in the Credit Agreement.

2. *First Amendment to Existing Credit Agreement.* Upon satisfaction of the conditions set forth in Section 5 hereof, the Borrower, the Lenders and the Administrative Agent hereby agree that the Existing Credit Agreement is hereby amended by incorporating the changes shown on the marked copy of the Existing Credit Agreement attached hereto as Annex C. Deletions of text in the Existing Credit Agreement as amended hereby are indicated by struck-through red text, and insertions of text as amended hereby are indicated by underlined blue text. Attached hereto as Annex D is a clean copy of the Credit Agreement conformed through the First Amendment. Certain schedules, which supplement the Schedules to the Credit Agreement are attached hereto as Annex A. Exhibit B to the Existing Credit Agreement is hereby amended and replaced in its entirety with the Exhibit B attached hereto as Annex B.

3. *Acknowledgement of Liens.* The Borrower hereby acknowledges and agrees that the Obligations owing to the Administrative Agent and the Lenders arising out of or in any manner relating to the Loan Documents shall continue to be secured by the Liens granted as security therefor in the Loan Documents, to the extent provided for in the Loan Documents

heretofore executed and delivered by the Borrower; and nothing herein contained shall in any manner affect or impair the priority of the Liens created and provided for thereby as to the indebtedness, obligations, and liabilities which would be secured thereby prior to giving effect to this Agreement.

4. *Representations And Warranties.* In order to induce the Administrative Agent and the Lenders to enter into this Agreement, the Borrower hereby represents and warrants to the Administrative Agent and the Lenders as follows:

(A) After giving effect to this Agreement, the representations and warranties of the Borrower contained in Article 7 of the Credit Agreement and in each other Loan Document shall be true and correct in all material respects on and as of the date hereof; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects on such respective dates.

(B) The execution, delivery and performance of this Agreement has been duly authorized by all necessary corporate action on the part of, and duly executed and delivered by, the Borrower.

(C) No Default or Event of Default has occurred and is continuing or shall occur and be continuing immediately after giving effect to this Agreement.

5. *Conditions Precedent.* The effectiveness of this Agreement is subject to the satisfaction of the following conditions precedent:

(A) The Administrative Agent and the Lenders shall have received executed counterparts of this Agreement duly executed and delivered by the Borrower.

(B) The Administrative Agent shall have received notice of cancellation endorsements and an additional insured endorsement reasonably acceptable to the Administrative Agent.

(C) The Administrative Agent and the Lenders shall have received resolutions of the board of directors (or similar governing body or committee of the board of directors, as applicable) of the Borrower approving and authorizing the execution, delivery and performance of this Agreement, certified as of the First Amendment Effective Date by its secretary or assistant secretary as being in full force and effect without modification or amendment.

(D) The Administrative Agent shall have received executed counterparts to that certain Notice of Security Interest in Patents dated as of the First Amendment Effective Date by and between the Borrower and the Administrative Agent.

(E) The Administrative Agent shall have received a Borrowing Notice, in accordance with Section 2.01(b)(ii) of the Credit Agreement, requesting the Borrowing of the Tranche B Loan duly executed by a Responsible Officer of Borrower.

6. *Reference to and Effect on the Loan Documents; No Novation.*

(A) This Agreement constitutes a Loan Document. On and after the date hereof, words of like import referring to the Credit Agreement, and each reference in the other Loan Documents to the "Credit Agreement", "thereunder", "thereof" or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement after giving effect to this Agreement.

(B) Except as specifically set forth in this Agreement, the Credit Agreement and the other Loan Documents shall remain in full force and effect and are hereby ratified and confirmed.

(C) Except as expressly set forth in this Agreement, the Loan Documents and all of the obligations of the Obligors thereunder and the rights and benefits of the Administrative Agent and the Lenders thereunder remain in full force and effect. This Agreement is not a novation nor is it to be construed as a release, waiver or modification of any of the terms, conditions, representations, warranties, covenants, rights or remedies set forth in the Loan Documents, except as specifically set forth herein. Without limiting the foregoing, the Obligors agree to comply with all of the terms, conditions, and provisions of the Loan Documents except to the extent such compliance is irreconcilably inconsistent with the express provisions of this Agreement. This Agreement may not be amended, supplemented, or otherwise modified except by a written agreement entered into in accordance with Section 13.04 of the Credit Agreement. THIS AGREEMENT REPRESENTS THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.

7. *Headings.* The headings in this Agreement are included for convenience of reference only and will not affect in any way the meaning or interpretation of this Agreement.

8. *Governing Law.* This Agreement, and all questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of New York.

9. *Incorporation of Sections 13.10 and 13.11 of the Credit Agreement.* The provisions set forth in Sections 13.10 (Jurisdiction, Service of Process and Venue) and 13.11 (Waiver of Jury Trial) of the Credit Agreement shall apply to this Agreement in all respects.

10. *Counterparts.* This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement. Delivery of an executed counterpart of this Agreement by facsimile,

DocuSign or a scanned copy by electronic mail shall be equally as effective as delivery of an original executed counterpart of this Agreement.

11. *Severability.* If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law, or public policy, all other conditions and provisions of this Agreement will nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner adverse to any party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto will negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

12. *Binding Effect.* This Agreement will be binding upon and inure to the benefit of and is enforceable by the respective successors and permitted assigns of the parties hereto.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

ISOPLEXIS CORPORATION, as Borrower

By: /s/ John Strahley

Name: John Strahley

Title: CFO

[Signature Page to First Amendment to Credit Agreement and Guaranty]

PERCEPTIVE CREDIT HOLDINGS III, LP,
as Administrative Agent and Lender

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By: /s/ Sandeep Dixit

Name: Sandeep Dixit

Title: Chief Credit Officer

By: /s/ Sam Chawla

Name: Sam Chawla

Title: Portfolio Manager

[Signature Page to First Amendment to Credit Agreement and Guaranty]

ANNEX C
Marked Credit Agreement

CREDIT AGREEMENT AND GUARANTY¹

DATED AS OF

DECEMBER 30, 2020

AMONG

ISOPLEXIS CORPORATION,
AS BORROWER,

THE GUARANTORS FROM TIME TO TIME PARTY HERETO,
AS GUARANTORS,

THE LENDERS FROM TIME TO TIME PARTY HERETO,
AS LENDERS,

AND

PERCEPTIVE CREDIT HOLDINGS III, LP,
AS ADMINISTRATIVE AGENT AND AS A LENDER

\$50,000,000

¹ Conformed to reflect changes from the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021

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CREDIT AGREEMENT AND GUARANTY, dated as of December 30, 2020 (this “*Agreement*”), among ISOPLEXIS CORPORATION, a Delaware corporation (“*Borrower*”), certain Guarantors from time to time parties hereto, the lenders from time to time party hereto (each, as a “*Lender*” and collectively, the “*Lenders*”), and PERCEPTIVE CREDIT HOLDINGS III, LP, a Delaware limited partnership (“*Perceptive*”), as administrative agent for the Lenders (in such capacity, together with its successors and assigns, the “*Administrative Agent*”).

WITNESSETH:

Borrower has requested the Lenders to make term loans to Borrower, and the Lenders are prepared to make such loans on and subject to the terms and conditions hereof. Accordingly, the parties agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Certain Defined Terms. As used herein, the following terms have the following respective meanings:

“*Accounting Change*” has the meaning set forth in Section 1.02.

“*Accounting Change Notice*” has the meaning set forth in Section 1.02.

“*Acquisition*” means any transaction, or any series of related transactions, by which any Person directly or indirectly, by means of a take-over bid, tender offer, amalgamation, merger, purchase of assets, or similar transaction having the same effect as any of the foregoing, (a) acquires all or substantially all of the assets of any Person engaged in any business, (b) acquires all or substantially all of a business line or unit or division of any other Person, (c) acquires control of securities of a Person engaged in a business representing more than 50% of the ordinary voting power for the election of directors or other governing body if the business affairs of such Person are managed by a Board or other governing body, or (d) acquires control of more than 50% of the ownership interest in any Person engaged in any business that is not managed by a Board or other governing body.

“*Act*” has the meaning set forth in Section 13.16.

“*Administrative Agent*” has the meaning set forth in the introduction hereto.

“*Affected Financial Institution*” means (a) any EEA Financial Institution or (b) any UK Financial Institution.

“*Affiliate*” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“*Agreement*” has the meaning set forth in the introduction hereto.

“*Anti-Corruption Laws*” means all laws, rules and regulations of any jurisdiction applicable to the Obligors and their Affiliates concerning or relating to bribery or corruption, including, without limitation, the Foreign Corrupt Practices Act of 1977, as amended.

“*Anti-Terrorism Laws*” means any laws or regulations relating to terrorism or money laundering, including, without limitation the *Bank Secrecy Act* (31 U.S.C. §§ 5311 *et seq.*), the *Money Laundering Control Act of 1986* (18 U.S.C. §§ 1956 *et seq.*), the USA Patriot Act and any similar law enacted in the United States after the date of this Agreement.

“*Applicable Margin*” means 9.50% per annum, as such percentage may be increased by Section 3.02(d).

“*Approved Fund*” means any Person (other than a natural person) that is engaged in making, purchasing, holding or investing in bank loans and similar extensions of credit in the ordinary course of its business and that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“*Asset Sale*” has the meaning set forth in Section 9.09.

“*Assignment Agreement*” means an assignment and assumption entered into by a Lender and an assignee of such Lender in substantially the form of Exhibit F.

“*Bail-In Action*” means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.

“*Bail-In Legislation*” means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).

“*Bankruptcy Code*” means Title 11 of the United States Code entitled “Bankruptcy.”

“*Beneficial Ownership Regulation*” has the meaning set forth in Section 13.16.

“*Benefit Plan*” means any employee benefit plan as defined in Section 3(3) of ERISA to which any Obligor or Subsidiary thereof incurs or otherwise has any obligation or liability, contingent or otherwise.

“*Board*” means, with respect to any Person, the board of directors (or equivalent governing body) of such Person or any Committee thereof.

“*Borrower*” has the meaning set forth in the introduction hereto.

“*Borrowing*” means a borrowing consisting of a Tranche A Loan made by the Lenders on the Closing Date, [a Tranche B Loan made by the Lenders on the Tranche B Loan Borrowing Date](#) or a Tranche **BC** Loan made by the Lenders on the Tranche **BC** Loan Borrowing Date, as applicable.

“*Borrowing Notice*” means a notice substantially in the form attached hereto as Exhibit B.

“*Business Day*” means a day (other than a Saturday or Sunday) on which commercial banks are not authorized or required to close in New York City and, when determined in connection with notices and determinations in respect of LIBOR or any Loan or any funding, Interest Period or any payments in respect of the Loans, that is also a day on which dealings in dollar deposits are carried on in the London interbank market.

“*Capital Lease Obligations*” means, as to any Person, the obligations of such Person to pay rent or other amounts under a lease of (or other agreement conveying the right to use) real and/or personal Property which obligations are required to be classified and accounted for as a capital lease on a balance sheet of such Person under GAAP and, for purposes of this Agreement, the amount of such obligations shall be the capitalized amount thereof, determined substantially in accordance with GAAP; *provided* that any obligations that were not required to be included on the balance sheet of such Person as capital lease obligations when incurred (whether now outstanding or at any time incurred or entered into) but are subsequently re-characterized as capital lease obligations due to a change in accounting rules under GAAP after the Closing Date shall for all purposes hereunder not be treated as a Capital Lease Obligation.

“*Casualty Event*” means any actual or constructive loss, condemnation, destruction, confiscation, requisition, seizure or forfeiture of all or any material portion of the assets of Borrower or any other Obligor, excluding only those assets, individually or in the aggregate, subject to any such event during any calendar year with a fair market value as of the date thereof equal to or less than \$1,000,000.

“*Change of Control*” means (a) any “person” or “group” (within the meaning of Rule 13d-5 of the Exchange Act as in effect on the date hereof) shall own, directly or indirectly, beneficially or of record, shares representing 40% or more of the aggregate ordinary voting power represented by the issued and outstanding Equity Interests of Borrower, (b) Borrower ceases to directly own, beneficially and of record, 100% of the issued and outstanding Equity Interests of each of its Subsidiaries, or (c) during any period of twelve (12) consecutive calendar

months, the occupation of a majority of the seats (other than vacant seats) on the Board of Borrower by Persons who were neither (i) nominated by the Board of Borrower, nor (ii) appointed by directors on the Board of Borrower on the Closing Date.

“*Claims*” includes claims, litigation, demands, complaints, grievances, actions, applications, suits, causes of action, orders, charges, indictments, prosecutions, information (brought by a public prosecutor without grand jury indictment) or other similar processes, assessments or reassessments.

“*CLIA*” means the Clinical Laboratory Improvement Amendments (CLIA) of 1988, as amended from time to time, and the rules, regulations, guidelines, guidance documents and compliance policy guides issued or promulgated thereunder.

“*Closing Date*” means the Business Day on which all of the conditions set forth in Section 6.01 have been satisfied or waived by the Lenders and the Tranche A Loan is made.

“*Closing Fee*” has the meaning set forth in Section 2.03.

“*Code*” means the Internal Revenue Code of 1986, as amended from time to time.

“*Collateral*” means any Property in which a Lien is purported to be granted under any of the Security Documents (or all such Property, as the context may require).

“*Collateral Questionnaire*” means that certain Collateral Questionnaire and certification by a Responsible Officer of Borrower substantially in the form of attached hereto as Exhibit I and otherwise in form and substance satisfactory to the Administrative Agent.

“*Commitment*” means, with respect to each Lender, such Lender’s (a) Tranche A Loan Commitment ~~and~~, (b) Tranche B Loan Commitment and (c) Tranche C Loan Commitment, and “*Commitments*” means all such commitments of all Lenders. The aggregate Commitments of all Lenders as of the ~~Closing Date is \$50,000,000~~ First Amendment Effective Date after giving effect to the Tranche A Loan made on the Closing Date and the Tranche B Term Loan made on the Tranche B Borrowing Date is \$15,000,000.

“*Committee*” means, with respect to any board of directors (or other governing body), any committee thereof duly authorized to act on behalf of such board of directors (or other governing body).

“*Commodity Account*” has the meaning set forth in the Security Agreement.

“*Compliance Certificate*” has the meaning set forth in Section 8.01(d).

“*Connection Income Taxes*” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“*Contracts*” means any contract, license, lease, agreement, obligation, promise, undertaking, understanding, arrangement, document, commitment, entitlement or engagement under which a Person has, or will have, any liability or contingent liability (in each case, whether written or oral, express or implied, and whether in respect of monetary or payment obligations, performance obligations or otherwise), excluding the Loan Documents.

“*Control*” means, in respect of a particular Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ability to exercise voting power, by contract or otherwise. “*Controlling*” and “*Controlled*” have meanings correlative thereto.

“*Controlled Account*” has the meaning set forth in Section 8.17(a)(i).

“*Copyrights*” has the meaning set forth in the Security Agreement.

“*Default*” means any Event of Default and any event that, upon the giving of notice, the lapse of time or both, would constitute an Event of Default.

“*Default Rate*” has the meaning set forth in Section 3.02(d).

“*Deposit Account*” has the meaning set forth in the Security Agreement and relates to such accounts located and/or maintained in the United States of America.

“*Designated Person*” means a person or entity:

(a) listed in the annex to, or otherwise targeted by the provisions of, the Executive Order (as disclosed by World-Check or another reputable commercially available database);

(b) named as a “Specially Designated National and Blocked Person” on the most current list published by OFAC at its official website or any replacement website or other replacement official publication of such list (as disclosed by World-Check or another reputable commercially available database); or

(c) with which the Lenders are prohibited from dealing or otherwise engaging in any transaction by any Economic Sanctions Laws.

“*Device*” means any instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related item, including any component, part or accessory, developed by the Obligors.

“*Disqualified Equity Interests*” means, with respect to any Person, any Equity Interest of such Person that, by its terms (or by the terms of any security or other Equity Interest into which it is convertible or for which it is exchangeable upon exercise or otherwise), or upon the happening of any event or condition (i) matures or is mandatorily redeemable (other than solely for Qualified Equity Interests), including pursuant to a sinking fund obligation or otherwise, (ii)

is redeemable at the option of the holder thereof (other than solely for Qualified Equity Interests), in whole or in part, (iii) provides for the scheduled payments of dividends or other distributions in cash or other securities that would constitute Disqualified Equity Interests, or (iv) is or becomes convertible into or exchangeable for Indebtedness or any other Equity Interests that would constitute Disqualified Equity Interests, in each case, prior to the date that is one hundred and eighty (180) days after the Stated Maturity Date; *provided* that, if such Equity Interests are issued pursuant to any plan for the benefit of directors, officers, employees or consultants of such Person or by any such plan to such directors, officers, employees or consultants, such Equity Interests shall not constitute Disqualified Equity Interests solely because they may be required to be repurchased by such Person upon the death, disability, retirement or termination of employment or service of such director, officer, employee or consultant.

“Dollars” and “\$” means lawful money of the United States of America.

“Domestic Subsidiary” means any Subsidiary that is organized under the laws of the United States, any state thereof or the District of Columbia.

“Economic Sanctions Laws” means:

(a) the Executive Order, the *International Emergency Economic Powers Act* (50 U.S.C. §§ 1701 *et seq.*), the *Trading with the Enemy Act* (50 U.S.C. App. §§ 1 *et seq.*), any other law or regulation promulgated thereunder from time to time and administered by OFAC and any similar law enacted in the United States after the date of this Agreement; and

(b) any other similar applicable law now or hereafter enacted in any other applicable jurisdiction.

“EEA Financial Institution” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority” means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“Environmental Law” means any federal, state, provincial or local governmental law, rule, regulation, order, writ, judgment, injunction or decree relating to pollution or protection of the environment or the treatment, storage, disposal, release, threatened release or handling of hazardous materials, and all local laws and regulations related to environmental matters and any

specific agreements entered into with any competent authorities which include commitments related to environmental matters.

“*Equity Interest*” means, with respect to any Person, any and all shares, interests, participations or other equivalents, including membership interests (however designated, whether voting or nonvoting), of equity of such Person, including, if such Person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, but excluding debt securities convertible or exchangeable into such equity.

“*ERISA*” means the United States Employee Retirement Income Security Act of 1974, as amended.

“*ERISA Affiliate*” means, collectively, any Obligor, Subsidiary thereof, and any Person under common control, or treated as a single employer, with any Obligor or Subsidiary thereof, within the meaning of Section 414(b), (c), (m) or (o) of the Code.

“*ERISA Event*” means (i) a reportable event as defined in Section 4043 of ERISA with respect to a Title IV Plan, excluding, however, such events as to which the PBGC by regulation has waived the requirement of Section 4043(a) of ERISA that it be notified within thirty (30) days of the occurrence of such event; (ii) the applicability of the requirements of Section 4043(b) of ERISA with respect to a contributing sponsor, as defined in Section 4001(a)(13) of ERISA, to any Title IV Plan where an event described in paragraph (9), (10), (11), (12) or (13) of Section 4043(c) of ERISA is reasonably expected to occur with respect to such plan within the following thirty (30) days; (iii) a withdrawal by any Obligor or any ERISA Affiliate thereof from a Title IV Plan or the termination of any Title IV Plan resulting in liability under Sections 4063 or 4064 of ERISA; (iv) the withdrawal of any Obligor or any ERISA Affiliate thereof in a complete or partial withdrawal (within the meaning of Section 4203 and 4205 of ERISA) from any Multiemployer Plan if there is any potential liability therefore, or the receipt by any Obligor or any ERISA Affiliate thereof of notice from any Multiemployer Plan that it is in reorganization or insolvency pursuant to Section 4241 or 4245 of ERISA; (v) the filing of a notice of intent to terminate, the treatment of a plan amendment as a termination under Section 4041 or 4041A of ERISA, or the commencement of proceedings by the PBGC to terminate a Title IV Plan or Multiemployer Plan; (vi) the imposition of liability on any Obligor or any ERISA Affiliate thereof pursuant to Sections 4062(e) or 4069 of ERISA or by reason of the application of Section 4212(c) of ERISA; (vii) the failure by any Obligor or any ERISA Affiliate thereof to make any required contribution to a Plan, or the failure to meet the minimum funding standard of Section 412 of the Code with respect to any Title IV Plan (whether or not waived in accordance with Section 412(c) of the Code) or the failure to make by its due date a required installment under Section 430 of the Code with respect to any Title IV Plan or the failure to make any required contribution to a Multiemployer Plan; (viii) the determination that any Title IV Plan is considered an at-risk plan or a plan in endangered to critical status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; (ix) an event or condition which might reasonably be expected to constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Title IV Plan or

Multiemployer Plan; (x) the imposition of any liability under Title I or Title IV of ERISA, other than PBGC premiums due but not delinquent under Section 4007 of ERISA, upon any Obligor or any ERISA Affiliate thereof; (xi) an application for a funding waiver under Section 303 of ERISA or an extension of any amortization period pursuant to Section 412 of the Code with respect to any Title IV Plan; (xii) the occurrence of a non-exempt prohibited transaction under Sections 406 or 407 of ERISA for which any Obligor or any Subsidiary thereof may be directly or indirectly liable; (xiii) a violation of the applicable requirements of Section 404 or 405 of ERISA or the exclusive benefit rule under Section 401(a) of the Code by any fiduciary or disqualified person for which any Obligor or any ERISA Affiliate thereof may be directly or indirectly liable; (xiv) the occurrence of an act or omission which could give rise to the imposition on any Obligor or any ERISA Affiliate thereof of fines, penalties, Taxes or related charges under Chapter 43 of the Code or under Sections 409, 502(c), (i) or (1) or 4071 of ERISA; (xv) the assertion of a material claim (other than routine claims for benefits) against any Plan or the assets thereof, or against any Obligor or any Subsidiary thereof in connection with any such plan; (xvi) receipt from the IRS of notice of the failure of any Qualified Plan to qualify under Section 401(a) of the Code, or the failure of any trust forming part of any Qualified Plan to fail to qualify for exemption from taxation under Section 501(a) of the Code; (xvii) the imposition of any lien (or the fulfillment of the conditions for the imposition of any lien) on any of the rights, properties or assets of any Obligor or any ERISA Affiliate thereof, in either case pursuant to Title I or IV, including Section 302(f) or 303(k) of ERISA or to Section 401(a)(29) or 430(k) of the Code; or (xviii) the establishment or amendment by any Obligor or any Subsidiary thereof of any "welfare plan," as such term is defined in Section 3(1) of ERISA, that provides post-employment welfare benefits in a manner that would increase the liability of any Obligor, other than those benefits required under the Consolidated Omnibus Budget Reconciliation Act.

"*ERISA Funding Rules*" means the rules regarding minimum required contributions (including any installment payment thereof) to Title IV Plans, as set forth in Sections 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

"*EU Bail-In Legislation Schedule*" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

"*Event of Default*" has the meaning set forth in Section 10.01.

"*Excess Funding Guarantor*" has the meaning set forth in Section 11.08.

"*Excess Payment*" has the meaning set forth in Section 11.08.

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

"*Excluded Accounts*" means deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the employees of Borrower and its Subsidiaries.

“*Excluded Taxes*” means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes and branch profits Taxes in each case (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of a Lender, its applicable lending office located in, the jurisdiction imposing such Tax or (ii) that are Other Connection Taxes, (b) any U.S. federal withholding Taxes that are imposed on amounts payable to Lender to the extent that the obligation to withhold amounts existed on the date that (i) Lender became a “Lender” under this Agreement or (ii) Lender changes its lending office, except in each case to the extent Lender is a direct or indirect assignee of any other Lender that was entitled, at the time the assignment of such other Lender became effective, to receive additional amounts under Section 5.03 or Lender was entitled to receive additional amounts under Section 5.03 immediately before it changed its lending office, (c) any Taxes imposed in connection with FATCA, and (d) Taxes attributable to such Recipient’s failure to comply with Section 5.03(e).

“*Executive Order*” means the US Executive Order No. 13224 on Blocking Property and Prohibiting Transactions with Persons who commit, Threaten to Commit, or Support Terrorism.

“*Expense Deposit*” means a cash deposit in the amount of \$50,000 made by Borrower to an Affiliate of Perceptive Advisors LLC pursuant to the Proposal Letter for the prepayment of the Lenders’ costs and expenses (payable pursuant to Section 13.03(a) and/or the Proposal Letter) incurred prior to the Closing Date.

“*FATCA*” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities entered into in connection with the implementation of the foregoing.

“*First Amendment*” means the First Amendment to Credit Agreement and Guaranty, dated as of May 27, 2021, among Borrower, the Lenders and the Administrative Agent.

“*First Amendment Effective Date*” means May 27, 2021.

“*Foreign Lender*” means a Lender that is not a U.S. Person.

“*Foreign Subsidiary*” means any Subsidiary that is not a Domestic Subsidiary.

“*GAAP*” means generally accepted accounting principles in the United States of America, as in effect from time to time, set forth in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants, in the statements and pronouncements of the Financial Accounting Standards Board and in such other statements by such other entity as may be in general use by significant segments of the

accounting profession that are applicable to the circumstances as of the date of determination. Subject to Section 1.02, all references to “GAAP” shall be to GAAP applied consistently with the principles used in the preparation of the financial statements described in Section 7.04(a).

“*Governmental Approval*” means any consent, authorization, approval, order, license, franchise, permit, certification, accreditation, registration, clearance, exemption, filing or notice that is issued or granted by or from (or pursuant to any act of) any Governmental Authority, including any application or submission related to any of the foregoing.

“*Governmental Authority*” means any nation, government, branch of power (whether executive, legislative or judicial), state, municipality or other political subdivision thereof and any entity exercising executive, legislative, judicial, monetary, regulatory or administrative functions of or pertaining to government, including without limitation regulatory authorities, governmental departments, agencies, commissions, bureaus, officials, ministers, courts, bodies, boards, tribunals and dispute settlement panels, and other law-, rule- or regulation-making organizations or entities of any State, territory, county, city or other political subdivision of the United States.

“*Guarantee*” of or by any Person (the “*guarantor*”) means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the “*primary obligor*”) in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided*, that the term Guarantee shall not include endorsements for collection or deposit in the Ordinary Course of Business.

“*Guarantee Assumption Agreement*” means a Guarantee Assumption Agreement substantially in the form of Exhibit A by an entity that, pursuant to Section 8.11(a), is required to become a “Guarantor”.

“*Guaranteed Obligations*” has the meaning set forth in Section 11.01.

“*Guarantor*” means, collectively, each Subsidiary of Borrower on the Closing Date or joined as a Guarantor from time to time pursuant to Section 8.11(a).

“*Hazardous Material*” means any substance, element, chemical, compound, product, solid, gas, liquid, waste, by-product, pollutant, contaminant or material which is hazardous or toxic, and includes, without limitation, (a) asbestos, polychlorinated biphenyls and petroleum (including crude oil or any fraction thereof) and (b) any material classified or regulated as “hazardous” or “toxic” or words of like import pursuant to an Environmental Law.

“*Hedging Agreement*” means any interest rate exchange agreement, foreign currency exchange agreement, commodity price protection agreement or other interest or currency exchange rate or commodity price hedging arrangement.

“*Immaterial Foreign Subsidiary*” means, as of any date, any Foreign Subsidiary for which (a) the consolidated total assets of such Foreign Subsidiary and its Subsidiaries, when taken together with the consolidated total assets of all other Immaterial Foreign Subsidiaries their subsidiaries, is not in excess of 5.0% of the consolidated total assets of the Borrower and its Subsidiaries and (b) the aggregate amount of the Total Revenue of such Foreign Subsidiary and its subsidiaries on a consolidated basis, when taken together with the contribution to Total Revenue of all other Immaterial Foreign Subsidiaries and their Subsidiaries on a consolidated basis, is not in excess of 5.0% of Total Revenue of the Borrower and its Subsidiaries, in each case as of the last day of any four quarter period; *provided* that notwithstanding the foregoing, at no time shall any Guarantor existing on the Closing Date or joined hereto pursuant to Section 8.11 subsequently be deemed an Immaterial Foreign Subsidiary.

“*Indebtedness*” of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes, loan agreements or similar instruments, (c) all obligations of such Person upon which interest charges are customarily paid, (d) all obligations of such Person under conditional sale or other title retention agreements relating to Property acquired by such Person, (e) all obligations of such Person in respect of the deferred purchase price of Property or services (excluding current accounts payable incurred in the Ordinary Course of Business not overdue by more than one hundred twenty (120) days), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on Property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (g) all Guarantees by such Person of Indebtedness of others, (h) all Capital Lease Obligations of such Person, (i) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit and letters of guaranty, (j) obligations under any Hedging Agreement, currency swaps, forwards, futures or derivatives transactions, (k) all obligations, contingent or otherwise, of such Person in respect of bankers’ acceptances, (l) all obligations of such Person under license or other agreements containing a guaranteed minimum payment or purchase by such Person, (m) any Disqualified Equity Interests of such Person, (n) any earnout obligation at the time such obligation is both required to be reflected as a liability on the balance sheet of such Person in accordance with GAAP and not paid after becoming due and payable and (o) all other obligations required to be classified as indebtedness of such Person under GAAP. The Indebtedness of any Person shall, without duplication, include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person’s ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor.

“*Indemnified Party*” has the meaning set forth in Section 13.03(b).

“*Indemnified Taxes*” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise described in clause (a), Other Taxes.

“*Ineligible Assignee*” means (a) a natural person or (b) the Obligors or any of their respective Affiliates.

“*Information*” has the meaning set forth in Section 13.17.

“*Insolvency Proceeding*” means (a) any case, action or proceeding before any court or other Governmental Authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or (b) any general assignment for the benefit of creditors, composition, marshaling of assets for creditors, or other, similar arrangement in respect of any Person’s creditors generally or any substantial portion of such Person’s creditors, in each case undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code.

“*Intellectual Property*” means all Patents, Trademarks, Copyrights, industrial designs, Technical Information, whether registered or not, whether domestic or foreign, including all of the following:

- (a) applications, registrations, amendments and extensions relating to any Intellectual Property;
- (b) rights and privileges arising under any applicable Laws with respect to any Intellectual Property;
- (c) rights to sue for or collect any damages from any past, present or future infringements of any Intellectual Property; and
- (d) rights of the same or similar effect or nature as described above in any jurisdiction corresponding to any Intellectual Property throughout the world.

“*Interest Period*” means, (a) initially, the period beginning on (and including) the Closing Date and ending on (and including) the last day of the calendar month in which the Closing Date occurs, and (b) thereafter, the period beginning on (and including) the first day of each succeeding calendar month and ending on the earlier of (and including) (x) the last day of such calendar month and (y) the Maturity Date.

“*Invention*” means any novel, inventive or useful art, apparatus, method, process, machine (including any article or Device), manufacture or composition of matter, or any novel, inventive and useful improvement in any art, method, process, machine (including any article or Device), manufacture or composition of matter.

“*Investment*” means, for any Person: (a) the acquisition (whether for cash, Property, services or securities or otherwise) of Equity Interests, bonds, notes, debentures, partnership or

other ownership interests or other securities of any other Person or any agreement to make any such acquisition (including any “short sale” or any sale of any securities at a time when such securities are not owned by the Person entering into such sale); (b) the making of any deposit with, or advance, loan, assumption of debt or other extension of credit to, any other Person (including the purchase of Property from another Person subject to an understanding or agreement, contingent or otherwise, to resell such Property to such Person), but excluding any such advance, loan or extension of credit in the nature of an ordinary course trade receivable having a term not exceeding ninety (90) days arising in connection with the sale of services, inventory or supplies by such Person in the Ordinary Course of Business; (c) the entering into of any Guarantee of, or other contingent obligation with respect to, Indebtedness or other liability of any other Person and (without duplication) any amount committed to be advanced, lent or extended to such Person; (d) entering into any joint venture; or (e) the entering into of any Hedging Agreement. The amount of an Investment will be determined at the time the Investment is made without giving effect to any subsequent changes in value.

“*IRS*” means the U.S. Internal Revenue Service or any successor agency, and to the extent relevant, the U.S. Department of the Treasury.

“*Laws*” means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“*Lenders*” has the meaning set forth in the introduction hereto.

“*LIBOR*” means, for any Interest Period, the rate per annum (rounded upwards if necessary, to the next 1/100%) equal to the London interbank offered rate for one-month deposits in Dollars appearing on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 as of 11:00 a.m. (London time) two (2) Business Days prior to the commencement of any Interest Period; *provided*, that in the event that such rate does not appear on the appropriate Bloomberg screen or the Dow Jones Markets Telerate Page 3750 (or otherwise on the Dow Jones Markets screen) at such time, “*LIBOR*” shall be determined by reference to such other comparable publicly available service for displaying the offered rate for deposit in Dollars in the London interbank market as may be selected by the Administrative Agent; *provided, further*, that in no event shall *LIBOR* be less than 1.75%.

“*Lien*” means any mortgage, lien, pledge, charge or other security interest, or any lease, title retention agreement, mortgage, restriction, easement, right-of-way, option or adverse claim (of ownership or possession) or other encumbrance of any kind or character whatsoever or any preferential arrangement that has the practical effect of creating a security interest.

“*Loan Documents*” means, collectively, this Agreement, the Notes, the Security Documents, any Guarantee Assumption Agreement, the Warrant Certificate and any

subordination agreement, intercreditor agreement or other present or future document, instrument, agreement or certificate delivered to any Lender in connection with this Agreement or any of the other Loan Documents, in each case, as amended, restated, supplemented or otherwise modified.

“*Loan Exposure*” means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Loans of such Lender; *provided*, at any time prior to the making of the Loans, the Loan Exposure of any Lender shall be equal to such Lender’s Commitment.

“*Loans*” means the Tranche A Loan, [Tranche B Loan](#) and the Tranche ~~BC~~ Loan.

“*Loss*” means judgments, debts, liabilities, expenses, costs, damages or losses, contingent or otherwise, whether liquidated or unliquidated, matured or unmatured, disputed or undisputed, contractual, legal or equitable, including loss of value, professional fees, including fees and disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any Claim or any proceeding relating to any Claim.

“*Majority Lenders*” means, at any time, one or more Lenders having or holding Loan Exposure and representing more than 50% of the aggregate Loan Exposure of all Lenders.

“*Margin Stock*” means “margin stock” within the meaning of Regulations U and X.

“*Material Adverse Change*” and “*Material Adverse Effect*” mean a material adverse change in or effect on (a) the business, financial condition, operations and performance of the Obligors taken as a whole, (b) the ability of any Obligor to perform its obligations under any Loan Document, (c) the value of the Property comprising Collateral (taken as a whole), or (d) the legality, validity, binding effect or enforceability of the Loan Documents or the rights and remedies of any Lender under any of the Loan Documents.

“*Material Agreement*” means (a) any Contract which is listed in Schedule 7.14, (b) any other Contract to which any Obligor is a party or a beneficiary from time to time, or to which any assets or properties of any Obligor is bound, the loss or termination of which would reasonably be expected to result in a Material Adverse Effect, ~~and~~ (c) any other Contract to which any Obligor is a party or a guarantor (or equivalent) whether existing as of the date hereof or in the future that during any period of twelve (12) consecutive months is reasonably expected to (i) result in payments or receipts (including royalty, licensing or similar payments) made to any Obligor in an aggregate amount in excess of \$1,000,000 or (ii) require payments or expenditures (including royalty, licensing or similar payments) made by any Obligor in an aggregate amount in excess of \$1,000,000, [\(d\) the Patent Purchase Agreement, \(e\) the Supply Agreement and \(f\) the QIAGEN Assumption Agreement.](#)

“*Material Indebtedness*” means, at any time, any Indebtedness of any Obligor, the outstanding principal amount of which, individually or in the aggregate, exceeds \$250,000.

“*Material Intellectual Property*” means all Obligor Intellectual Property, including those described in Schedule 7.05(b), whether currently owned or licensed, or acquired, developed or otherwise licensed or obtained after the date hereof (a) necessary for the operation of the business of any Obligor as currently conducted or as currently contemplated to be conducted, (b) the loss of which would reasonably be expected to have or result in a Material Adverse Effect or (c) that has a fair market value in excess of \$1,000,000.

“*Maturity Date*” means the earlier to occur of (a) the Stated Maturity Date, and (b) the date on which the Loans are accelerated pursuant to Section 10.02.

“*Multiemployer Plan*” means any multiemployer plan, as defined in Section 4001(a)(3) of ERISA, to which any ERISA Affiliate incurs or otherwise has any obligation or liability, contingent or otherwise.

“*Net Cash Proceeds*” means,

(a) with respect to the incurrence or issuance of any Indebtedness incurred by an Obligor not permitted under Section 9.01, the excess, if any, of (i) the sum of the cash received in connection with such incurrence or issuance over (ii) the investment banking fees, underwriting discounts, commissions, costs and other reasonable expenses and other customary expenses (including reasonable attorney’s, accountant’s and other similar professional advisor’s fees), incurred by such Obligor in connection with such incurrence or issuance to third parties (other than any other Obligor or any of their respective Affiliates),

(b) with respect to any Casualty Event, the amount of cash proceeds actually received from time to time by or on behalf of an Obligor after deducting therefrom only (i) actual costs and expenses related thereto incurred by such Obligor in connection therewith and (ii) Taxes paid or payable in connection therewith, and

(c) with respect to any Asset Sale, the excess, if any, of (i) cash proceeds received in respect of such Asset Sale (including cash proceeds subsequently received (as and when received)) over (ii) the sum of (A) the direct costs of such Asset Sale then payable by the recipient of such proceeds excluding amounts payable to any Obligor, (B) sales and use taxes paid or payable by such recipient as a result thereof, (C) amounts required to be applied to repay principal, interest and prepayment premiums and penalties on Indebtedness secured by a Permitted Lien on the properties subject to such Asset Sale and (D) amounts reserved or deposited in escrow with respect to indemnity payments or price adjustments until such amounts are released to the Obligors.

“*Note*” means a promissory note executed and delivered by Borrower to any Lender in the form attached hereto as Exhibit C.

“*Obligations*” means, with respect to any Obligor, all amounts, obligations (including, without limitation, all Warrant Obligations), liabilities, covenants and duties of every type and description owing by such Obligor to any Lender or any other Indemnified Party hereunder, arising out of, under, or in connection with, any Loan Document, whether direct or indirect

(regardless of whether acquired by assignment), absolute or contingent, due or to become due, whether liquidated or not, now existing or hereafter arising and however acquired, and whether or not evidenced by any instrument for the payment of money, including, without duplication, (a) all Loans, (b) all interest on the Loans (including interest at the Default Rate), whether or not accruing after the filing of any petition in bankruptcy or after the commencement of any insolvency, reorganization or similar proceeding, and whether or not a claim for post-filing or post-petition interest is allowed in any such proceeding, (c) any Prepayment Premium, and (d) all other fees, expenses (including fees, charges and disbursement of counsel), interest, commissions, charges, costs, disbursements, indemnities and reimbursement of amounts paid and other sums chargeable to such Obligor under any Loan Document.

“*Obligor Intellectual Property*” means Intellectual Property owned by or licensed to any of the Obligors.

“*Obligors*” means, collectively, Borrower, each Guarantor and each of their respective successors and permitted assigns.

“*OFAC*” means the Office of Foreign Assets Control of the U.S. Department of the Treasury (or any successor thereto).

“*Ordinary Course of Business*” means, with respect to the Obligors, the ordinary course of business generally consistent with past custom and practice (including with respect to nature, scope, magnitude, quantity and frequency).

“*Organizational Documents*” means (a) with respect to any corporation, its certificate or articles of incorporation or organization, as amended, and its by-laws, as amended, (b) with respect to any limited partnership, its certificate of limited partnership, as amended, and its partnership agreement, as amended, (c) with respect to any general partnership, its partnership agreement, as amended, and (d) with respect to any limited liability company, its articles of organization, as amended, and its operating agreement, as amended. In the event any term or condition of this Agreement or any other Loan Document requires any Organizational Document to be certified by a secretary of state or similar government official, the reference to any such “Organizational Document” shall only be to a document of a type customarily certified by such government official.

“*Other Connection Taxes*” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“*Other Taxes*” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are

Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 5.03(g)).

“Participant” has the meaning set forth in Section 13.05(e).

“Participant Register” has the meaning set forth in Section 13.05(f).

“Patent Purchase Agreement” means that certain asset purchase agreement, as in effect on the First Amendment Effective Date, by and among Borrower, as QIAGEN Sciences, LLC, a Delaware limited liability company, and QIAGEN GmbH, a German corporation, collectively as sellers, dated as of May 12, 2021, whereby Borrower purchased all rights, privileges, title and interest in and to certain patents, along with the inventions described and claimed in the patents, and all rights to income, royalties and damages for infringement of the patents (the “QIAGEN Patents”).

“Patents” has the meaning set forth in the Security Documents.

“Payment Date” means the last day of each Interest Period; *provided* that if such last day of such Interest Period is not a Business Day, then the Payment Date for such Interest Period will be the next succeeding Business Day.

“PBGC” means the United States Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

“Perceptive” has the meaning set forth in the introduction hereto.

“Permits” means all permits, licenses, registrations, certificates, orders, approvals, authorizations, consents, waivers, franchises, variances and similar rights issued by or obtained from any Governmental Authority or any other Person, including, without limitation, those relating to Environmental Laws.

“Permitted Acquisition” means any Acquisition by any Obligor or any of its wholly-owned Subsidiaries, by (a) purchase, merger, amalgamation, license or otherwise, of all or substantially all of the assets of, all of the Equity Interests of, or a business line or unit or a division of, any Person or (b) license arrangement for the rights to use, develop, market or otherwise commercialize any Patents, Trademarks, Copyrights or other Intellectual Property (other than ordinary course, over the counter software license arrangements); *provided* that:

- (i) **immediately prior to, and immediately after giving effect thereto, no Default shall have occurred and be continuing or would result therefrom;**
- (ii) **all transactions in connection therewith shall be consummated, in all material respects, in accordance with all applicable Laws and in conformity in all material respects with all applicable Governmental Approvals;**

- (iii) **in the case of the Acquisition of all of the Equity Interests of such Person, all of the Equity Interests (except for any such securities in the nature of directors' qualifying shares required pursuant to applicable Law) acquired, or otherwise issued by such Person or any newly formed Subsidiary of such Obligor in connection with such Acquisition, shall be owned 100% by an Obligor or any other Subsidiary of Borrower, and Borrower shall have taken, or caused to be taken, as of the date such Person becomes a Subsidiary of an Obligor, each of the actions set forth in Section 8.11, if applicable;**
- (iv) **such Person (in the case of an Acquisition of Equity Interests) or assets (in the case of an Acquisition of assets or a division) (i) shall be engaged or used, as the case may be, in the same business or lines of business in which Borrower and/or its Subsidiaries are engaged or a business reasonably and substantially related thereto or (ii) shall have a similar customer base as Borrower and/or its Subsidiaries;**
- (v) **Borrower shall have provided the Administrative Agent with at least ten (10) Business Days' prior written notice of any such Acquisition, together with summaries, prepared in reasonable detail, of all due diligence conducted by or on behalf of Borrower or the applicable Subsidiary prior to such Acquisition;**
- (vi) **all of the assets or Equity Interests acquired in connection with such Acquisition shall be of a U.S. Person;**
- (vii) **the Acquisition shall have been approved by the Board or other governing body or controlling Person of the Person acquired or the Person from whom such assets or division is acquired; and**
- (viii) **on a *pro forma* basis after giving effect to such Acquisition, Borrower and its Subsidiaries shall be in compliance with Section 8.15.**

"Permitted Cash Equivalent Investments" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than two (2) years from the date of acquisition, (b) commercial paper with an average maturity of no more than one (1) year and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc., (c) any money market funds or other investment vehicles whose principal investments are in investments described in clauses (a) or (b) above, and (d) certificates of deposit maturing no more than one (1) year after issue.

"Permitted Indebtedness" means any Indebtedness permitted under Section 9.01.

“*Permitted Licenses*” means (a) licenses of over-the-counter software that is commercially available to the public ~~and~~, (b) licenses for the use of Obligor Intellectual Property, in each case, entered into in the Ordinary Course of Business or as otherwise may be approved by the applicable Obligor’s Board and so long as (i) no Event of Default has occurred and is continuing at the time such license is entered into and (ii) such license does not materially impair the Lenders from exercising their rights under any of the Loan Documents and (c) licenses pursuant to the Supply Agreement.

“*Permitted Liens*” means any Liens permitted under Section 9.02.

“*Permitted Priority Liens*” means (a) Liens permitted under Section 9.02(d), (e), (f) or (g) and (b) Liens permitted under Section 9.02(b); *provided* that such Liens are also of the type described in Section 9.02(d), (e), (f) or (g).

“*Permitted Refinancing*” means, with respect to any Indebtedness permitted to be refinanced, extended, renewed or replaced hereunder, any refinancings, extensions, renewals and replacements of such Indebtedness; *provided* that such refinancing, extension, renewal or replacement shall not (a) increase the outstanding principal amount of the Indebtedness being refinanced, extended, renewed or replaced, (b) contain terms relating to outstanding principal amount, amortization, interest rate or equivalent yield, maturity, collateral security (if any) or subordination (if any), or other material terms that, taken as a whole, are less favorable in any material respect to any Obligor or the Lenders than the terms of any agreement or instrument governing the Indebtedness being refinanced, (c) contain any new requirement to grant any Lien or to give any Guarantee that was not an existing requirement of the Indebtedness being refinanced and (d) after giving effect to such refinancing, extension, renewal or replacement, no Default shall have occurred (or could reasonably be expected to occur) as a result thereof.

“*Person*” means any individual, corporation, company, voluntary association, partnership, limited liability company, joint venture, trust, unincorporated organization or Governmental Authority or other entity of whatever nature.

“*PFIC*” has the meaning set forth in Section 8.01(j).

“*Plan*” means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an “employer” as defined in Section 3(5) of ERISA.

“*Prepayment Premium*” has the meaning set forth in Section 3.03(a)(i).

“*Pro Rata Share*” has the meaning set forth in Section 11.08.

“*Prohibited Payment*” means any bribe, rebate, payoff, influence payment, kickback or other payment or gift of money or anything of value (including meals or entertainment) to any officer, employee or ceremonial office holder of any government or instrumentality thereof,

political party or supra-national organization (such as the United Nations), any political candidate, any royal family member or any other person who is connected or associated personally with any of the foregoing that is prohibited under any Requirement of Law.

“*Projections*” has the meaning set forth in Section 7.04(b).

“*Property*” of any Person means any property or assets, or interest therein, of such Person.

“*Proportionate Share*” means, with respect to any Lender, the percentage obtained by dividing (a) the Loan Exposure of such Lender then in effect by (b) the aggregate Loan Exposure of all Lenders then in effect.

“*Proposal Letter*” means the letter agreement, dated November 27, 2020, among Borrower and Perceptive Advisors LLC, regarding the transactions contemplated hereby and the outline of proposed terms and conditions attached thereto.

“*Publicly Reporting Company*” means an issuer generally subject to the public reporting requirements of the Exchange Act.

“*QIAGEN Assumption Agreement*” means that certain assumption agreement dated as of May 12, 2021 by and among Borrower, QIAGEN Sciences, LLC, a Delaware limited liability company and QIAGEN GmbH.

“*Qualified Equity Interest*” means, with respect to any Person, any Equity Interest of such Person that is not a Disqualified Equity Interest.

“*Qualified Plan*” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (i) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was ever obligated to make, contributions, and (ii) that is intended to be tax qualified under Section 401(a) of the Code.

“*Qualified Public Offering*” means the initial firm-commitment underwritten public offering of common Equity Interests of the Borrower pursuant to an effective registration statement filed with the SEC in accordance with the Securities Act of 1933, raising net cash proceeds of at least \$50,000,000, and in connection with such offering the common Equity Interests of the Borrower is listed for trading on the Nasdaq Stock Market’s National Market, the New York Stock Exchange, or another exchange or marketplace acceptable to the Administrative Agent in its sole discretion.

“*Recipient*” means any Lender or the Administrative Agent.

“*Redemption Date*” has the meaning set forth in Section 3.03(a).

“*Redemption Price*” has the meaning set forth in Section 3.03(a).

“*Register*” has the meaning set forth in Section 13.05(d).

“*Regulation T*” means Regulation T of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation U*” means Regulation U of the Board of Governors of the Federal Reserve System, as amended.

“*Regulation X*” means Regulation X of the Board of Governors of the Federal Reserve System, as amended.

“*Representatives*” has the meaning set forth in Section 13.17.

“*Requirement of Law*” means, as to any Person, any Law applicable to or binding upon such Person or any of its Properties or revenues.

“*Resignation Effective Date*” has the meaning set forth in Section 12.06(a).

“*Responsible Officer*” of any Person means each of the president, chief executive officer and chief financial officer of such Person.

“*Restricted Payment*” means any dividend or other distribution (whether in cash, securities or other Property) with respect to any Equity Interest of Borrower or any of its Subsidiaries, or any payment (whether in cash, securities or other Property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such shares of capital stock of Borrower or any of its Subsidiaries or any option, warrant or other right to acquire any such shares of capital stock of Borrower or any of its Subsidiaries.

“*Restrictive Agreement*” means any indenture, agreement, instrument or other binding arrangement that prohibits, restricts or imposes any condition upon (a) the ability of any Obligor to create, incur or permit to exist any Lien upon any of its Property (other than (i) customary provisions in contracts (including without limitation leases and in-bound licenses of Intellectual Property) restricting the assignment thereof, (ii) restrictions or conditions imposed by any agreement governing secured Permitted Indebtedness permitted under Section 9.01(g), to the extent that such restrictions or conditions apply only to the Property securing such Indebtedness and (iii) software and other Intellectual Property licenses pursuant to which an Obligor is the licensee of the relevant software or Intellectual Property, as the case may be (in which case, any prohibition or limitation shall relate only to the assets or rights subject to the applicable license and/or the license itself)), or (b) the ability of any Obligor to pay dividends or other distributions with respect to any shares of its Equity Interests or to make or repay loans or advances to any Obligor or to Guarantee Indebtedness of any Obligor.

“*Resolution Authority*” means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.

“*Sanctions*” means economic or financial sanctions, requirements or trade embargoes imposed, administered or enforced from time to time by Governmental Authorities (including, but not limited to, OFAC, the U.S. Department of State and the U.S. Department of Commerce).

“*Sanctions Laws*” means all laws, rules, regulations and requirements of any jurisdiction applicable to the Obligors or any party to the Loan Documents concerning or relating to Sanctions, terrorism or money laundering.

“*SEC*” means United States Securities and Exchange Commission.

“*Securities Account*” has the meaning set forth in the Security Agreement.

“*Security Agreement*” means the Security Agreement, dated as of the date hereof, in substantially the form of Exhibit G, among the Obligors, the Lenders and the Administrative Agent, granting a security interest in the personal Property constituting Collateral thereunder in favor of the Administrative Agent for the benefit of the Lenders.

“*Security Documents*” means, collectively, the Security Agreement, each Short-Form IP Security Agreement, and each other security document, control agreement or financing statement executed to perfect Liens in favor of the Administrative Agent for the benefit of the Lenders.

“*Short-Form IP Security Agreements*” means short-form copyright, patent or trademark (as the case may be) security agreements, dated as of the date hereof, in substantially the form of Exhibits H-1 and H-2, entered into by one or more Obligors in favor of the Administrative Agent for the benefit of the Lenders, each in form and substance satisfactory to the Administrative Agent.

“*Solvent*” means, with respect to any Person at any time, that (a) the present fair saleable value of the Property of such Person is greater than the total amount of liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the Property of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, and (c) such Person has not incurred and does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person’s ability to pay as such debts and liabilities mature.

“*Stated Maturity Date*” means the fifth (5th) anniversary of the Closing Date; *provided* that if such date shall occur on a day that is not a Business Day, then the Stated Maturity Date shall be the immediately succeeding Business Day.

“*Subsidiary*” means, with respect to any Person (the “*parent*”) at any time of determination, any other Person of which more than 50% of the outstanding capital stock of such other Person having ordinary voting powers, determined on a fully diluted basis, is at the time directly or indirectly owned or controlled by the parent. Unless the context otherwise specifically requires, the term “*Subsidiary*” shall be a reference to a Subsidiary of Borrower.

“Supply Agreement” means that certain supply agreement, as in effect on the First Amendment Effective Date, by and between QIAGEN GmbH, dated as of May 12, 2021, whereby Borrower (a) licenses certain rights in the QIAGEN Patents to QIAGEN GmbH and (b) purchases certain reagents incorporating the QIAGEN Patents.

“Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Technical Information” means all trade secrets and other proprietary or confidential information, which may include any information of a scientific, technical, or business nature in any form or medium, standards and specifications, conceptions, ideas, innovations, discoveries, Invention disclosures, all documented research, developmental, demonstration or engineering work, data, plans, specifications, reports, summaries, experimental data, manuals, models, samples, know-how, technical information, systems, methodologies, computer programs or information technology.

“Title IV Plan” means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (a) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was obligated to make, contributions, and (b) that is or was subject to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA.

“Total Revenue” means, with respect to the Obligors, all amounts paid to and received by such Person in the ordinary course of business that, in accordance with GAAP, would be classified as net revenue.

“Trademarks” has the meaning set forth in the Security Documents.

“Tranche A Loan” means each loan advanced by a Lender pursuant to Section 2.01(a). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche A Loan on any date of determination shall mean the aggregate principal amount of the Tranche A Loan made pursuant to Section 2.01(a) that has not yet been repaid as of such date.

“Tranche A Loan Commitment” means the commitment of a Lender to make or otherwise fund a Tranche A Loan and “Tranche A Loan Commitments” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche A Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche A Loan Commitments as of the Closing Date is \$25,000,000.

“Tranche B Loan” means each loan advanced by a Lender pursuant to Section 2.01(b). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche B Loan on any date of determination shall mean the aggregate principal amount of the Tranche B Loan made pursuant to Section 2.01(b) that has not yet been repaid as of such date.

“*Tranche B Loan Borrowing Date*” means with respect to the Tranche B Loan, the Business Day on which all conditions set forth in Section 6.02 have been satisfied or waived by the Lenders and the Tranche B Loan is made hereunder.

“*Tranche B Loan Commitment*” means the commitment of a Lender to make or otherwise fund a Tranche B Loan and “*Tranche B Loan Commitments*” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche B Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche B Loan Commitments as of the ~~Closing~~First Amendment Effective Date is ~~\$25,000,000~~10,000,000.

“*Tranche B Loan Commitment Termination Date*” means May 28, 2021.

“*Tranche C Loan*” means each loan advanced by a Lender pursuant to Section 2.01(c). For purposes of clarification, any calculation of the aggregate outstanding principal amount of the Tranche C Loan on any date of determination shall mean the aggregate principal amount of the Tranche C Loan made pursuant to Section 2.01(c) that has not yet been repaid as of such date.

“*Tranche C Loan Borrowing Date*” means with respect to the Tranche C Loan, the Business Day on which all conditions set forth in Section 6.03 have been satisfied or waived by the Lenders and the Tranche C Loan is made hereunder.

“*Tranche C Loan Commitment*” means the commitment of a Lender to make or otherwise fund a Tranche C Loan and “*Tranche C Loan Commitments*” means such commitments of all Lenders in the aggregate. The amount of each Lender’s Tranche C Loan Commitment, if any, is set forth on Schedule 1. The aggregate amount of the Tranche C Loan Commitments as of the First Amendment Effective Date is \$15,000,000.

“*Tranche C Loan Commitment Termination Date*” means March 31, 2022.

“*Transactions*” means the execution, delivery and performance by each Obligor of this Agreement and the other Loan Documents to which such Obligor is a party and the other transactions contemplated hereby and thereby, including disbursement and application of the proceeds of the Loans.

“*UK Financial Institution*” means any BRRD Undertaking (as such term is defined under the PRA Rulebook (as amended ~~from~~from time to time) promulgated by the United Kingdom Prudential Regulation Authority) or any person falling within IFPRU 11.6 of the FCA Handbook (as amended from time to time) promulgated by the United Kingdom Financial Conduct Authority, which includes certain credit institutions and investment firms, and certain affiliates of such credit institutions or investment firms.

“*UK Resolution Authority*” means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

“*Unrestricted Cash*” means the balance of unencumbered cash (other than cash encumbered by the Liens granted to the Lenders pursuant to the Loan Documents) and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in a Controlled Account.

“*U.S. Person*” means a “United States person” within the meaning of Section 7701(a)(30) of the Code.

“*U.S. Tax Compliance Certificate*” has the meaning set forth in Section 5.03(f)(ii)(B)(3).

“*Warrant Certificate*” means the warrant to be delivered to the Administrative Agent pursuant to Section 6.01(i) that, among other things, grants the holder thereof the right to purchase the number of shares of Series D Preferred Stock of Borrower as indicated on the Warrant Shares table on Schedule 1, as the Warrant Certificate may be amended, replaced or otherwise modified pursuant to the terms thereof.

“*Warrant Obligations*” means, with respect to Borrower, all of its Obligations arising out of, under or in connection with, any Warrant Certificate.

“*Withdrawal Liability*” means, at any time, any liability incurred (whether or not assessed) by any ERISA Affiliate and not yet satisfied or paid in full at such time with respect to any Multiemployer Plan pursuant to Section 4201 of ERISA.

“*Write-Down and Conversion Powers*” means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

Section 1.02. Accounting Terms and Principles. All accounting determinations required to be made pursuant hereto shall, unless expressly otherwise provided herein, be made substantially in accordance with GAAP. If, after the date hereof, any change occurs in GAAP or in the application thereof (an “*Accounting Change*”) and such change would cause any amount required to be determined for the purposes of the covenants to be maintained or calculated pursuant to Article 8 or 9 to be materially different than the amount that would be determined prior to such change, then Borrower will provide a detailed notice of such change (an “*Accounting Change Notice*”) to the Administrative Agent in conjunction with the next required delivery of financial statements pursuant to Section 8.01. If Borrower requests an amendment to any provision hereof to eliminate the effect of any Accounting Change occurring after the Closing Date or in the application thereof on the operation of such provision, regardless of

whether any Accounting Change Notice is given before or after such Accounting Change or in the application thereof, then the Administrative Agent and Borrower agree that they will negotiate in good faith amendments to the provisions of this Agreement that are directly affected by such Accounting Change with the intent of having the respective positions of the Administrative Agent and Borrower after such Accounting Change conform as nearly as possible to their respective positions as of the date of this Agreement and, until any such amendments have been agreed upon, (a) the provisions in this Agreement shall be calculated as if no such Accounting Change had occurred and (b) Borrower shall provide to the Administrative Agent a written reconciliation in form and substance reasonably satisfactory to the Administrative Agent, between calculations of any baskets and other requirements hereunder before and after giving effect to such Accounting Change.

All components of financial calculations made to determine compliance with this Agreement shall be adjusted to include or exclude, as the case may be, without duplication, such components of such calculations attributable to any Acquisition or disposition of assets consummated after the first day of the applicable period of determination and prior to the end of such period, as determined in good faith by Borrower based on assumptions expressed therein and that were reasonable based on the information available to Borrower at the time of preparation of the Compliance Certificate setting forth such calculations.

Section 1.03. Interpretation. For all purposes of this Agreement, except as otherwise expressly provided herein or unless the context otherwise requires, (a) the terms defined in this Agreement include the plural as well as the singular and vice versa; (b) words importing gender include all genders; (c) any reference to a Section, Article, Annex, Schedule or Exhibit refers to a Section or Article of, or Annex, Schedule or Exhibit to, this Agreement; (d) any reference to “this Agreement” refers to this Agreement, including all Annexes, Schedules and Exhibits hereto, and the words herein, hereof, hereto and hereunder and words of similar import refer to this Agreement and its Annexes, Schedules and Exhibits as a whole and not to any particular Section, Article, Annex, Schedule, Exhibit or any other subdivision; (e) references to days, months and years refer to calendar days, months and years, respectively; (f) all references herein to “include” or “including” shall be deemed to be followed by the words “without limitation”; (g) the word “from” when used in connection with a period of time means “from and including” and the word “until” means “to but not including”; and (h) accounting terms not specifically defined herein shall be construed substantially in accordance with GAAP (except for the term “property,” which shall be interpreted as broadly as possible, including, in any case, cash, securities, other assets, rights under contractual obligations and permits and any right or interest in any property, except where otherwise noted). Unless otherwise expressly provided herein, references to organizational documents, agreements (including the Loan Documents) and other contractual instruments shall be deemed to include all subsequent amendments, restatements, extensions, supplements and other modifications thereto permitted by the Loan Documents.

Section 1.04. Divisions. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction’s laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person and (b) if any new Person comes into

existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

ARTICLE 2 THE COMMITMENTS

Section 2.01. Loans.

(a) *Tranche A Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche A Loan to Borrower on the Closing Date in Dollars in a principal amount equal to such Lender's Tranche A Loan Commitment. No Lender shall have an obligation to make a Tranche A Loan in excess of such Lender's Tranche A Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.01), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least one (1) Business Day in advance of the Closing Date.

(iii) Borrower may make one borrowing under the Tranche A Loan Commitment which shall be on the Closing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche A Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche A Loan Commitment shall terminate immediately and without further action on the Closing Date after giving effect to the funding of such Lender's Tranche A Loan Commitment on such date.

(b) *Tranche B Loan.*

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche B Loan to Borrower on the Tranche B Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche B Loan Commitment. No Lender shall have an obligation to make a Tranche B Loan in excess of such Lender's Tranche B Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.02), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche B Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche B Loan Commitment which shall be on the Tranche B Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche B Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche B Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche B Loan Borrowing Date after giving effect to the funding of such Lender's Tranche B Loan Commitment on such date and (y) the Tranche B Loan Commitment Termination Date.

(c) Tranche C Loan.

(i) Subject to the terms and conditions of this Agreement and relying on the representations and warranties set forth herein, each Lender, severally and not jointly, agrees to provide its share of the Tranche C Loan to Borrower on the Tranche C Loan Borrowing Date in Dollars in a principal amount equal to such Lender's Tranche C Loan Commitment. No Lender shall have an obligation to make a Tranche C Loan in excess of such Lender's Tranche C Loan Commitment.

(ii) Subject to the terms and conditions of this Agreement (including Section 6.03), Borrower shall deliver to the Administrative Agent a fully executed Borrowing Notice no later than 5 p.m. (New York City time) at least three (3) Business Days in advance of the proposed Tranche C Loan Borrowing Date.

(iii) Borrower may make one borrowing under the Tranche C Loan Commitment which shall be on the Tranche C Loan Borrowing Date. Subject to Section 3.03, all amounts owed hereunder with respect to the Tranche C Loan shall be paid in full no later than the Maturity Date. Each Lender's Tranche C Loan Commitment shall terminate immediately and without further action on the earlier of (x) the Tranche C Loan Borrowing Date after giving effect to the funding of such Lender's Tranche C Loan Commitment on such date and (y) the Tranche C Loan Commitment Termination Date.

(c) Any principal amount of any Loans borrowed under Section 2.01(a), 2.01(b) or 2.01(~~bc~~) hereof and subsequently repaid or prepaid may not be reborrowed.

Section 2.02. Proportionate Shares. All Loans shall be made, and all participations purchased, by the Lenders simultaneously and proportionately to their respective Proportionate Shares, it being understood that no Lender shall be responsible for any default by any other Lender in such other Lender's obligation to make a Loan hereunder or purchase a participation required hereby nor shall the Commitment of any Lender be increased or decreased as a result of a default by any other Lender in such other Lender's obligation to make a Loan requested hereunder or purchase a participation required hereby.

Section 2.03. Fees. On the Closing Date, Borrower shall pay to the Administrative Agent (out of the proceeds of the Tranche A Loan advanced by such Lenders on the Closing Date) for distribution to each Lender in accordance with its pro rata share of Loans, a non-refundable fee

(the “Closing Fee”) in the amount of \$750,000. Payment of the Closing Fee shall be in addition to such fees, costs and expenses due and payable pursuant to Section 12.03.

Section 2.04. Notes. Upon the request of any Lender, Borrower shall prepare, execute and deliver to such Lender one or more Notes evidencing the Loans payable to such Lender (or if requested by it, to it and its registered assigns).

Section 2.05. Use of Proceeds. Borrower shall use the proceeds of the Loans (a) for general working capital purposes and corporate purposes, (b) to refinance certain existing Indebtedness on the Closing Date and (c) to pay, in accordance with the funds flow attached to the Borrowing Notice, fees, costs and expenses incurred in connection with the Transactions.

ARTICLE 3

PAYMENTS OF PRINCIPAL AND INTEREST

Section 3.01. Repayment. There will be no scheduled repayments of principal on the Loans prior to the Maturity Date. The entire outstanding principal amount of the Loans, together with all accrued and unpaid interest thereon, will be due and payable on the Maturity Date.

Section 3.02. Interest.

(a) *Interest Generally.* Borrower agrees to pay to the Lenders interest in cash on the outstanding principal amount of the Loans for each Interest Period at a rate per annum equal to the sum of (i) LIBOR plus (ii) the Applicable Margin.

(b) *LIBOR Not Determinable.* If on or before the day on which LIBOR is to be determined, the Majority Lenders reasonably determine that (i) LIBOR cannot be determined for any reason, (ii) LIBOR will not adequately and fairly reflect the cost of maintaining the Loans or (iii) Dollar deposits in the principal amount of the Loans are not available in the London interbank market, the Majority Lenders shall, as soon as practicable thereafter, give written notice of such determination to Borrower and the Administrative Agent. Upon any such determination, LIBOR shall be LIBOR as of the end of the immediately preceding Interest Period and shall at all times thereafter bear interest at LIBOR as of the end of the immediately preceding Interest Period. Each determination by the Majority Lenders hereunder shall be conclusive and binding absent manifest error.

(c) *Replacement to LIBOR.* If at any time the Administrative Agent reasonably determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (b)(i) of this Section have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (b)(i) of this Section have not arisen but the supervisor for the administrator of LIBOR has made a public statement identifying a specific date after which LIBOR shall no longer be used for determining interest rates for loans, then the Administrative Agent and Borrower shall endeavor to establish an alternate rate of interest to LIBOR that gives due consideration to the then-prevailing market

convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable; *provided* that, if such alternate rate of interest shall be less than 1.75%, such rate shall be deemed to be 1.75% for the purposes of this Agreement. Notwithstanding anything to the contrary in Section 13.04, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five (5) Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Majority Lenders stating that such Lenders object to such amendment.

(d) *Default Interest.* Notwithstanding the foregoing, upon the occurrence and during the continuance of any Event of Default, the Applicable Margin shall increase automatically by 4.00% per annum (the interest rate, as increased pursuant to this Section 3.02(d), being the “*Default Rate*”). Notwithstanding any other provision herein, if interest is required to be paid at the Default Rate, it shall also be paid entirely in cash. If any Obligation is not paid when due under any applicable Loan Document, the amount thereof shall accrue interest at the Default Rate. Payment or acceptance of the increased rates of interest provided for in this Section 3.02(d) is not a permitted alternative to timely payment and shall not constitute a waiver of any Default or otherwise prejudice or limit any rights or remedies of the Administrative Agent or any Lender.

(e) *Payment Dates.* Accrued interest on the Loans shall be payable in arrears on each Payment Date with respect to the most recently completed Interest Period in cash, and upon the payment or prepayment of the Loans (on the principal amount being so paid or prepaid); *provided* that interest payable at the Default Rate shall be payable from time to time on demand by the Majority Lenders.

(f) *Maximum Rate.* Notwithstanding any other provision of this Agreement, in no event will any interest or rates referred to herein exceed the maximum interest rate permitted by applicable Law. If such maximum interest rate would be exceeded by the terms hereof, the rates of interest payable hereunder will be reduced to the extent necessary so that such rates (together with any fees or other amounts which are construed by a court of competent jurisdiction to be interest or in the nature of interest) equal the maximum interest rate permitted by applicable Law and any overpayment of interest received by the Lenders before such rates are so construed will be applied, forthwith after determination of such overpayment, to pay all then outstanding interest, and thereafter to pay outstanding principal.

Section 3.03. Prepayments.

(a) *Optional Prepayments.* (i) Borrower shall have the right to optionally prepay in whole or in part (in a minimum amount of \$500,000 and integral multiples of \$100,000 in excess of that amount for each partial prepayment, or, if less, the entire outstanding principal amount of the Loans) the outstanding principal amount of the Loans on any Business Day (a “*Redemption Date*”) for an amount equal to the sum of (x) the aggregate principal amount of the Loans being prepaid, (y) the prepayment premium set forth in clause (ii) below (the “*Prepayment Premium*”) and (z) any accrued but unpaid interest in respect of the aggregate principal amount of the Loans

being prepaid (such aggregate amount, the “*Redemption Price*”). The applicable Prepayment Premium shall be an amount calculated pursuant to Section 3.03(a)(ii).

(ii) If the Redemption Date occurs:

- (A) on or prior to the first anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to seven percent (7%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;**
- (B) after the first anniversary of the Closing Date and on or prior to the second anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to six percent (6%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;**
- (C) after the second anniversary of the Closing Date and on or prior to the third anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to four percent (4%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;**
- (D) after the third anniversary of the Closing Date and on or prior to the fourth anniversary of the Closing Date, the Prepayment Premium shall be an amount equal to three percent (3%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date; and**
- (E) after the fourth anniversary of the Closing Date and prior to the Stated Maturity Date, the Prepayment Premium shall be an amount equal to two percent (2%) of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date.**

No Prepayment Premium shall be due with respect to repayment of the Loans on the Stated Maturity Date.

(iii) Payment of any Prepayment Premium under this Section 3.03 constitutes liquidated damages, not unmatured interest or a penalty, as the actual amount of damages to the Lenders as a result of the relevant triggering event, prepayment or repayment would be impracticable and extremely difficult to ascertain. Accordingly, any Prepayment Premium hereunder is provided by mutual agreement of the Obligors and the Lenders as a reasonable estimation and calculation of such actual lost profits and other actual damages of the Lenders. Without limiting the generality of the foregoing, it is understood and

agreed that upon the occurrence of any prepayment event, any Prepayment Premium shall be automatically and immediately due and payable as though any prepaid or repaid portion of the Loans were voluntarily prepaid as of such date and shall constitute part of the Obligations secured by the Collateral. Any Prepayment Premium shall also be automatically and immediately due and payable if the Loans are satisfied or released by foreclosure (whether by power of judicial proceeding or otherwise), deed in lieu of foreclosure or by any other means. EACH OBLIGOR HEREBY EXPRESSLY WAIVES (TO THE FULLEST EXTENT IT MAY LAWFULLY DO SO) THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE OR OTHER LAW THAT PROHIBITS OR MAY PROHIBIT THE COLLECTION OF THE FOREGOING PREPAYMENT PREMIUM IN CONNECTION WITH ANY SUCH EVENTS. Borrower and the other Obligors expressly agree (to the fullest extent it and they may lawfully do so) that with respect to any Prepayment Premium payable under the terms of this Agreement: (A) such Prepayment Premium is reasonable and is the product of an arm's length transaction between sophisticated business parties, ably represented by counsel; (B) such Prepayment Premium shall be payable notwithstanding the then-prevailing market rates at the time payment is made; (C) there has been a course of conduct between the Lenders and the Obligors giving specific consideration in this transaction for such agreement to pay such Prepayment Premium; and (D) the Obligors shall be estopped hereafter from claiming differently than as agreed to in this paragraph. The Obligors expressly acknowledge that their agreement to pay such Prepayment Premium as herein described is a material inducement to the Lenders to provide the Commitments and to make the Loans.

(b) *Mandatory Prepayments.* Borrower shall prepay the Loans in amounts as provided below, plus the Prepayment Premium on the principal amount of the Loans being prepaid (calculated in accordance with Section 3.03(a)(ii), it being agreed that the relevant payment date shall be deemed to be the "Redemption Date" for purposes of such calculation), plus any accrued but unpaid interest and fees then due and owing, as follows:

(i) In the event of any Casualty Event, an amount equal to 100% of the Net Cash Proceeds received by any Obligor with respect thereto; *provided, however,* so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may apply the Net Cash Proceeds of any casualty policy up to \$1,000,000 with respect to any loss, but not exceeding \$2,000,000 in the aggregate for all losses under all casualty policies during the term of this Agreement, toward the replacement or repair of destroyed or damaged property; *provided, further,* that any such replaced or repaired property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents.

(ii) In the event any Obligor incurs Indebtedness other than Indebtedness that is permitted by Section 9.01 hereof, 100% of the Net Cash Proceeds thereof received by such Obligor. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(ii) shall not be deemed to be a consent to any such incurrence of Indebtedness or a cure or waiver of any Event of Default which occurs in connection

therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

(iii) In the event any Obligor consummates an Asset Sale other than an Asset Sale that is permitted by Section 9.09 hereof (other than Section 9.09(i)), 100% of the Net Cash Proceeds received by such Obligor in connection with such Asset Sale; *provided, however*, so long as no Default has occurred and is continuing, within one hundred eighty (180) days after receipt of such Net Cash Proceeds, the Obligors may use such Net Cash Proceeds not exceeding \$500,000 in the aggregate for all Asset Sales during the term of this Agreement, to purchase, replace, repair or restore properties or assets used in the Obligors' businesses; *provided, further*, that any such purchased, replaced, repaired or restored property shall be Collateral in which the Administrative Agent for the benefit of the Lenders has been granted a security interest under the Security Documents. For the avoidance of doubt, any partial prepayment made pursuant to this Section 3.03(b)(iii) shall not be deemed to be a consent to any Asset Sale or a cure or waiver of any Event of Default which occurs in connection therewith, it being understood that any such Event of Default may only be waived with the express consent of the Majority Lenders.

ARTICLE 4

PAYMENTS

Section 4.01. Payments.

(a) *Payments Generally.* Each payment of principal, interest and other amounts to be made by the Obligors under this Agreement or any other Loan Document shall be made in Dollars, in immediately available funds, without deduction, set off or counterclaim, to the deposit account of the Administrative Agent specified to Borrower from time to time, not later than 2:00 p.m. (Eastern time) on the date on which such payment shall become due (each such payment made after such time on such due date to be deemed to have been made on the next succeeding Business Day).

(b) *Application of Payments.* Each payment under this Agreement or any other Loan Document shall be applied in the following order of priority, with proceeds being applied to a succeeding level of priority only if amounts owing pursuant to the immediately preceding level of priority have been paid in full in cash:

- (i) *first*, to the payment of any unpaid costs and expenses referred to in Section 13.03(a) then due and owing;
- (ii) *second*, in reduction of Borrower's obligation to pay any unpaid interest and any fees then due and owing including, without limitation, (x) interest payable pursuant to Section 3.02(d) and (y) any Prepayment Premium, if applicable;

- (iii) *third*, in reduction of Borrower's obligation to pay any Claims or Losses referred to in Section 13.03(b) then due and owing;
- (iv) *fourth*, to the payment of unpaid principal of the Loans on a pro rata basis;
- (v) *fifth*, in reduction of any other Obligation then due and owing; and
- (vi) *sixth*, to Borrower or such other Persons as may lawfully be entitled to or directed by Borrower to receive the remainder.

Unless otherwise directed by the Majority Lenders, all payments of principal, interest and fees under this Agreement and the other Loan Documents shall be made by the Obligors to the Lenders pro rata in accordance with the Lenders' respective Proportionate Shares of such payments.

(c) *Non-Business Days*. If the due date of any payment under this Agreement (whether in respect of principal, interest, fees, costs or otherwise) would otherwise fall on a day that is not a Business Day, such date shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension.

Section 4.02. Computations. All computations of interest and fees hereunder shall be computed on the basis of a year of 360 days and actual days elapsed during the period for which payable.

Section 4.03. Notices. Each notice of optional prepayment shall be effective only if received by the Lenders not later than 2:00 p.m. (Eastern time) on the date three (3) Business Days prior to the date of prepayment. Each notice of optional prepayment shall specify the amount to be prepaid and the date of prepayment.

Section 4.04. Set-Off.

(a) *Set-Off Generally*. Upon the occurrence and during the continuance of any Event of Default, the Administrative Agent, the Lenders and each of their respective Affiliates are hereby authorized at any time and from time to time, to the fullest extent permitted by Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time owing by the Lenders or such Affiliates to or for the credit or the account of any Obligor against any and all of the Obligations, whether or not the Lenders shall have made any demand and although such Obligations may be unmatured. Any Person exercising rights of set-off hereunder agrees to promptly notify Borrower after any such set-off and application, *provided* that the failure to give such notice shall not affect the validity of such set-off and application. The rights of the Lenders and their respective Affiliates under this Section 4.04 are in addition to other rights and remedies (including other rights of set-off) that the Lenders and their respective Affiliates may have.

(b) *Exercise of Rights Not Required.* Nothing contained herein shall require the Administrative Agent, the Lenders or any of their respective Affiliates to exercise any such right or shall affect the right of such Persons to exercise, and retain the benefits of exercising, any such right with respect to any other indebtedness or obligation of any Obligor.

ARTICLE 5

YIELD PROTECTION

Section 5.01. Additional Costs.

(a) *Change in Requirements of Law Generally.* If, on or after the date hereof, the adoption of any Requirement of Law, or any change in any Requirement of Law, or any change in the interpretation or administration thereof by any court or other Governmental Authority charged with the interpretation or administration thereof, or compliance by any Lender (or its lending office) with any request or directive (whether or not having the force of law) of any such Governmental Authority, shall impose, modify or deem applicable any reserve (including any such requirement imposed by the Board of Governors of the Federal Reserve System), special deposit, contribution, insurance assessment or similar requirement, in each case that becomes effective after the date hereof, against assets of, deposits with or for the account of, or credit extended by, a Lender (or its lending office) or shall impose on a Lender (or its lending office) any other condition affecting the Loans or the Commitment, not as a result of any action or inaction on the part of such Lender, and the result of any of the foregoing is to increase the cost to any Lender of making or maintaining its portion of the Loans, or to reduce the amount of any sum received or receivable by any Lender under this Agreement or any other Loan Document, by an amount reasonably deemed by such Lender in good faith to be material (other than (i) Indemnified Taxes, (ii) Taxes described in clauses (b) through (d) of the definition of “*Excluded Taxes*” and (iii) Connection Income Taxes), then Borrower shall, without duplication, pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender for such increased cost or reduction. Notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to constitute a change in Requirements of Law for all purposes of this Section 5.01, regardless of the date enacted, adopted or issued.

(b) *Change in Capital Requirements.* If a Lender shall have determined that, on or after the date hereof, the adoption of any Requirement of Law regarding capital adequacy, or any change therein, or any change in the interpretation or administration thereof by any Governmental Authority charged with the interpretation or administration thereof, or any request or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, in each case that becomes effective after the date hereof, has or would have the effect of reducing the rate of return on capital of a Lender (or its parent) as a

consequence of a Lender's obligations hereunder or the Loans to a level below that which a Lender (or its parent) could have achieved but for such adoption, change, request or directive by an amount reasonably deemed by it to be material, then Borrower shall pay to such Lender on demand therefor such additional amount or amounts as will compensate such Lender (or its parent) for such reduction.

(c) *Notification by Lender.* The Lenders will promptly notify Borrower of any event of which it has knowledge, occurring after the date hereof, which will entitle a Lender to compensation pursuant to this Section 5.01. Before giving any such notice pursuant to this Section 5.01(c) such Lender shall designate a different lending office if such designation (x) will, in the reasonable judgment of such Lender, avoid the need for, or reduce the amount of, such compensation and (y) will not, in the reasonable judgment of such Lender, be materially disadvantageous to such Lender. A certificate of the Lender claiming compensation under this Section 5.01, setting forth the amount or amounts to be paid to it hereunder, shall be conclusive and binding on Borrower in the absence of manifest error.

Section 5.02. Illegality. Notwithstanding any other provision of this Agreement, in the event that on or after the date hereof the adoption of or any change in any Requirement of Law or in the interpretation or application thereof by any competent Governmental Authority shall make it unlawful for a Lender or its lending office to make or maintain the Loans (and, in the opinion of such Lender, the designation of a different lending office would either not avoid such unlawfulness or would be disadvantageous to such Lender), then such Lender shall promptly notify Borrower thereof following which (a) the Lender's Commitment shall be suspended until such time as such Lender may again make and maintain the Loans hereunder and (b) if such Requirement of Law shall so mandate, the Loans shall be prepaid by Borrower on or before such date as shall be mandated by such Requirement of Law in an amount equal to the Redemption Price applicable on the date of such prepayment in accordance with Section 3.03(a); *provided* that no Prepayment Premium pursuant to Section 3.03(a)(ii) shall be due with respect thereto.

Section 5.03. Taxes.

(a) *Payments Free of Taxes.* Any and all payments by or on account of any Obligation shall be made without deduction or withholding for any Taxes, except as required by applicable Law. If any applicable Law (as determined in the good faith discretion of the Administrative Agent) requires the deduction or withholding of any Tax from any such payment by an Obligor, then such Obligor shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by such Obligor shall be increased as necessary so that after such deduction or withholding for Indemnified Taxes has been made (including such deductions and withholdings for Indemnified Taxes applicable to additional sums payable under this Section 5.03) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding for Indemnified Taxes been made. For purposes of this Section, the term "applicable Law" includes FATCA.

(b) *Payment of Other Taxes by Borrower.* Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable Law, or at the option of the Administrative Agent, timely reimburse it for, Other Taxes.

(c) *Evidence of Payments.* As soon as practicable after any payment of Taxes by Borrower to a Governmental Authority, as a withholding Tax pursuant to this Section 5.03, Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, or a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(d) *Indemnification.* Borrower shall reimburse and indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 5.03) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) *Indemnification by the Lender.* Each Lender shall severally indemnify the Administrative Agent, within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), and (ii) any Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to such Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) *Status of Lenders.* (i) Any Lender that is entitled to an exemption from, or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower and the Administrative Agent at the time or times reasonably requested by Borrower or the Administrative Agent such properly completed and executed documentation reasonably requested by Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Law or as reasonably requested by Borrower or the Administrative Agent as will enable Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and

submission of such documentation (other than such documentation set forth in Section 5.03(f)(ii)(A), (B) or (D)) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing:

(A) any Lender that is a U.S. Person shall deliver to Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), duly completed, valid, executed copies of IRS Form W-9 (or successor form) certifying that such Lender is exempt from U.S. Federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, duly completed, valid executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "interest" article of such Tax treaty and (y) with respect to any other applicable payments under any Loan Document, duly completed, valid, executed originals of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "business profits" or "other income" article of such Tax treaty;

(2) duly completed, valid, executed copies of IRS Form W-8ECI (or successor form);

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit D to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "*U.S. Tax Compliance Certificate*") and (y) executed copies of IRS Form W-8BEN (or successor form) or IRS Form W-8BEN-E (or successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, duly completed, valid, executed copies of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI (or successor form), IRS Form W-8BEN (or successor form), IRS Form W-8BEN-E (or successor form), a U.S. Tax Compliance Certificate, IRS Form W-9 (or successor form), and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Administrative Agent (in such number of copies as shall be requested by the Recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Administrative Agent), executed copies of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower and the Administrative Agent at the time or times prescribed by Law and at such time or times reasonably requested by Borrower or the Administrative Agent such documentation prescribed by applicable Law (including as prescribed by Section 1471(b)(3)(C) (i) of the Code) and such additional documentation reasonably requested by Borrower or the Administrative Agent as may be necessary for Borrower or the Administrative Agent to comply with its obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Recipient agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall promptly update such form or certification or promptly notify Borrower and the Administrative Agent in writing of its legal inability to do so.

(g) *Treatment of Certain Refunds.* If any party to this Agreement determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 5.03 (including by the payment of additional amounts pursuant to this Section 5.03), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such

indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the written request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this Section 5.03(g), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this Section 5.03(g) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts giving rise to such refund had never been paid. This Section 5.03(g) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(h) *Mitigation Obligations.* If Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or to any Governmental Authority for the account of any Lender pursuant to Section 5.01 or this Section 5.03, then such Lender shall (at the request of Borrower) use commercially reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates if, in the sole reasonable judgment of such Lender, such designation or assignment and delegation would (i) eliminate or reduce amounts payable pursuant to Section 5.01 or this Section 5.03, as the case may be, in the future, (ii) not subject such Lender to any unreimbursed cost or expense and (iii) not otherwise be disadvantageous to such Lender.

(i) *Survival.* Each party's obligations under this Article 5 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all Obligations under any Loan Document.

Section 5.04. Delay in Requests. Failure or delay on the part of any Lender to demand compensation pursuant to this Article 5 shall not constitute a waiver of such Lender's right to demand such compensation; *provided* that Borrower shall not be required to compensate a Lender pursuant to this Article for any increased costs incurred or reductions suffered more than six (6) months prior to the date that such Lender notifies Borrower of the change in Law giving rise to such increased costs or reductions, and of such Lender's intention to claim compensation therefor (except that, if the change in Law giving rise to such increased costs or reductions is retroactive, then the six (6) month period referred to above shall be extended to include the period of retroactive effect thereof).

ARTICLE 6

CONDITIONS PRECEDENT

Section 6.01. Conditions to Tranche A Loan; Closing Date. The obligation of each Lender to make the Tranche A Loan on the Closing Date shall not become effective until the following conditions precedent shall have been reasonably satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche A Loan hereunder):

(a) *Organization and Capitalization.* The organizational structure and pro-forma capitalization of the Obligor, after giving effect to the Transactions, as set forth on Schedule 7.19 shall be satisfactory to the Administrative Agent.

(b) *Terms of Material Agreements.* The Administrative Agent shall be satisfied in its sole discretion with the terms and conditions of all of the Obligor's Material Agreements.

(c) *No Law Restraining Transactions.* No applicable Law or regulation shall restrain, prevent or, in the reasonable judgment of the Administrative Agent, impose materially adverse conditions upon the Transactions.

(d) *Lien Searches.* The Administrative Agent shall be satisfied with Lien searches regarding the Obligor made prior to the Closing Date.

(e) *Documentary Deliveries.* The Administrative Agent shall have received the following documents, each of which shall be in form and substance satisfactory to the Administrative Agent:

(i) *Agreement.* This Agreement duly executed and delivered by Borrower and each of the other parties hereto.

(ii) *Security Documents.*

(A) The Security Documents, including, without limitation, the Security Agreement, each Short-Form IP Security Agreement and financing statements, each in form and substance satisfactory to the Administrative Agent and duly executed and delivered by each of the Obligor and the other parties thereto.

(B) The Collateral Questionnaire, duly executed and delivered by a Responsible Officer of Borrower, substantially in the form of Exhibit I hereto and otherwise in form and substance satisfactory to the Administrative Agent.

(C) Without limitation, all other documents and instruments reasonably required to perfect the Administrative Agent's Lien on, and security interest in, the Collateral required to be delivered on or prior to the Closing Date shall have been duly executed and delivered and be in proper form for filing, and shall create in favor of the Administrative Agent, a perfected Lien on, and security interest in, the Collateral, subject to no Liens other than Permitted Liens.

(iii) *Note.* Any Notes requested in accordance with Section 2.04.

(iv) *Approvals.* Borrower shall certify to the Administrative Agent that all material licenses, consents, authorizations and approvals of, and notices to and filings and registrations with, any Governmental Authority (including all foreign exchange approvals) in connection with the Transactions have been made or obtained, and all material third-party consents and approvals, necessary in connection with the execution, delivery and performance by the Obligor of the Loan Documents and the Transactions have been obtained.

(v) *Organizational Documents.* (A) Certified copies of the Organizational Documents of each Obligor and of resolutions of the Board (or similar governing body) of each Obligor approving and authorizing the execution, delivery and performance of this Agreement and each of the other Loan Documents to which it is a party, certified as of the Closing Date by a Responsible Officer of such Obligor as being in full force and effect without modification or amendment; (B) a good standing certificate and/or compliance certificate from the applicable Governmental Authority of each Obligor's (x) jurisdiction of incorporation and (y) jurisdiction(s) in which it is qualified as a foreign corporation or other entity to do business (except where failure to be in good standing would not, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect), each dated a recent date prior to the Closing Date; and (C) such other documents as the Administrative Agent may reasonably request.

(vi) *Incumbency Certificate.* A certificate of each Obligor as to the authority, incumbency and specimen signatures of the persons who have executed the Loan Documents and any other documents in connection herewith on behalf of the Obligor.

(vii) *Opinion of Counsel.* A favorable opinion, dated as of the Closing Date, of Wiggin and Dana LLP, counsel to each Obligor in form reasonably acceptable to the Administrative Agent and its counsel.

(viii) *Evidence of Insurance.* Certificates from Borrower's insurance broker or other evidence satisfactory to the Administrative Agent that all insurance required to be maintained pursuant to Section 8.05 is in full force and effect.

(ix) *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(a)(ii) duly executed and delivered by a Responsible Officer of Borrower, in form and substance satisfactory to the Administrative Agent.

(f) *Due Diligence.* The Administrative Agent shall have received and be satisfied with all due diligence regarding the Obligors (including without limitation historical financial statements, Projections, technical, operational, legal, intellectual property, commercial market forecasts, clinical and regulatory assessments, supply chain, securities, labor, Tax, litigation, environmental, reimbursement and regulatory authority matters) in its sole discretion.

(g) *Indebtedness.* As of the Closing Date, after giving effect to the Transactions, no Obligor shall have Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A. All amounts due or outstanding in respect of any Indebtedness other than the Obligations and any Indebtedness specified on Schedule 7.13A shall have been repaid in full, all commitments (if any) in respect thereof terminated, all guarantees (if any) thereof discharged and released and all security therefor (if any) released, together with all fees and other amounts owing thereon, or documentation in form and substance satisfactory to the Administrative Agent to effect such release upon such repayment and termination shall have been delivered to the Administrative Agent.

(h) *Closing Fees, Expenses, Etc.* The Lenders and their Affiliates shall have received for their own account, the Closing Fee and all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03, after deducting therefrom the Expense Deposit.

(i) Warrant Certificate. The Administrative Agent shall have received the executed Warrant Certificate, dated as of the Closing Date.

(j) *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Closing Date; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(k) *No Default.* No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

(l) *Miscellaneous.* The Administrative Agent and each Lender shall have received such other opinions, instruments, certificates and documents as the Administrative Agent or such Lender shall have reasonably requested with prior notice to Borrower.

(m) *Equity Raise.* Borrower shall have completed the Series D preferred equity raise on terms and provisions reasonably satisfactory to the Administrative Agent, which results in minimum gross cash proceeds to Borrower of at least \$75,000,000.

Section 6.02. Conditions to Tranche B Loan; Tranche B Loan Borrowing Date. The obligation of each Lender to make the Tranche B Loan on the Tranche B Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche B Loan hereunder):

(a) ~~*Intentionally omitted.*~~

~~(b)~~ *Borrowing Notice.* The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(b) (ii) requesting the Borrowing of the Tranche B Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.

~~(c)~~ *Representations and Warranties.* The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche B Loan Borrowing Date; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; *provided further* that any representation and warranty that is qualified as to "materiality", "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

~~(d)~~ *No Default. No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.*

Section 6.03. Conditions to Tranche C Loan; Tranche C Loan Borrowing Date. The obligation of each Lender to make the Tranche C Loan on the Tranche C Loan Borrowing Date shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Administrative Agent (which satisfaction or waiver may be made simultaneously with the making of the Tranche C Loan hereunder):

(a) *Borrowing Notice. The Administrative Agent shall have received a Borrowing Notice in accordance with Section 2.01(c)(ii) requesting the Borrowing of the Tranche C Loan duly executed by a Responsible Officer of Borrower and Borrower's updated Schedules to this Agreement (if any), in form and substance satisfactory to the Administrative Agent.*

(b) Representations and Warranties. The representations and warranties of the Obligors contained in Article 7 or any other Loan Document shall be true and correct in all material respects on and as of the Tranche C Loan Borrowing Date; provided that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects.

(c) No Default. No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.

~~(d) No Default. No Default shall exist, or would result from such proposed Borrowing or from the application of the proceeds therefrom.~~

~~(e) Officer’s Certificate.~~ A certificate, dated as of the Tranche **BC** Borrowing Date and signed by a Responsible Officer of Borrower, confirming compliance with the conditions set forth in this Section ~~6.02~~**6.03**.

~~(f) Milestone.~~ The Administrative Agent shall have received evidence satisfactory to the Administrative Agent that Borrower has received Total Revenue of at least \$20,000,000 for the twelve (12) month period most recently ended.

~~(g) Expenses, Etc.~~ The Lenders and their Affiliates shall have received for their own account, all fees, costs and expenses due (including applicable attorney costs and the reasonable and documented out-of-pocket fees and expenses of any other advisors to the Lenders) and payable pursuant to Section 13.03.

The borrowing of the Loans shall constitute a certification by Borrower to the effect that the conditions set forth in Section 6.01, Section 6.02 and Section ~~6.02~~**6.03** as applicable, have been fulfilled as of the Closing Date, the Tranche B Loan Borrowing Date or the Tranche **BC** Loan Borrowing Date, or waived by the Administrative Agent on behalf of the Lenders, as applicable.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES

In order to induce the Lenders to enter into this Agreement and to extend the Loans hereunder, each Obligor represents and warrants to the Administrative Agent and the Lenders, on the Closing Date, on the Tranche B Loan Borrowing Date and on the Tranche **BC** Loan Borrowing Date, as applicable, that the following statements are true and correct:

Section 7.01. Power and Authority. Each Obligor and each of its Subsidiaries (a) is duly organized, validly existing and in good standing under the Laws of its jurisdiction of

organization, (b) has all requisite corporate (or equivalent) power, and has all material governmental licenses, authorizations, consents and approvals necessary to own its assets and carry on its business as now being or as proposed to be conducted except to the extent that failure to have the same would not reasonably be expected to have a Material Adverse Effect, (c) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such qualification necessary except where failure to so qualify would not (either individually or in the aggregate) reasonably be expected to have a Material Adverse Effect, and (d) has full power, authority and legal right to make and perform each of the Loan Documents and, in the case of Borrower, to borrow the Loans hereunder.

Section 7.02. Authorization; Enforceability. The Transactions are within each Obligor's corporate (or equivalent) powers and have been duly authorized by all necessary corporate (or equivalent) action and, if required, by all necessary shareholder or other equity holder action. The Loan Documents have been duly executed and delivered by each Obligor party thereto and constitutes, and each of the other Loan Documents to which it is a party when executed and delivered by such Obligor will constitute, a legal, valid and binding obligation of such Obligor, enforceable against each Obligor in accordance with its terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or similar Laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 7.03. Governmental and Other Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any other Person, except for (i) such as have been obtained or made and are in full force and effect, (ii) filings and recordings in respect of perfecting or recording the Liens created pursuant to the Security Documents and (iii) those consents listed on Schedule 7.03, (b) will not violate any Requirement of Law or the Organizational Documents of any Obligor or any order of any Governmental Authority, other than any such violations that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect, (c) will not violate or result in a default under any Material Agreement, or give rise to a right thereunder to require any payment to be made by any such Person, and (d) will not result in the creation or imposition of any Lien (other than Permitted Liens) on any asset of any Obligor or any of its Subsidiaries.

Section 7.04. Financial Statements; Projections; Material Adverse Change.

(a) *Financial Statements.* Borrower has heretofore furnished to the Administrative Agent certain financial statements as provided for in Section 8.01. Such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of the Obligors as of such dates and for such periods substantially in accordance with GAAP, subject to quarterly or year-end adjustments and the absence of footnotes. No Obligor has any material contingent liabilities or liabilities for taxes, long-term lease or unusual forward or long-term commitments not disclosed in the aforementioned financial statements.

(b) *Projections.* On and as of the Closing Date, the projections of the Obligors (collectively, the “*Projections*”) are based on good faith estimates and assumptions made by the management of Borrower; *provided*, the Projections are not to be viewed as facts and that actual results during the period or periods covered by the Projections may differ from such Projections and that the differences may be material; *provided, further*, as of the Closing Date, the management of Borrower believes that the Projections are reasonable and attainable.

(c) *No Material Adverse Change.* Since December 31, 2019, no event, circumstance or change has occurred that has caused or evidences, either in individually or in the aggregate, a Material Adverse Change.

Section 7.05. Properties.

(a) *Property Generally.* Each Obligor has good and marketable fee simple title to, or valid leasehold or license interests in, all its real and personal Property material to its business, subject only to Permitted Liens and except as would not reasonably be expected to interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) *Intellectual Property.* (i) Schedule 7.05(b) lists, with respect to each Obligor, all United States and foreign registrations of and applications for Patents, Trademarks, Copyrights, and industrial designs that are Obligor Intellectual Property, including the applicable jurisdiction, registration or application number and date, as applicable thereto, a designation as to whether it is Material Intellectual Property, and a designation as to whether it is licensed or owned by Obligor.

(ii) Each Obligor (A) owns or possesses all legal and beneficial rights, title and interest in and to Material Intellectual Property designated on Schedule 7.05(b) as being owned by such Obligor and (B) has the right to use the Material Intellectual Property licensed to such Obligor, in each case free and clear of any Liens or Claims of any kind, other than Permitted Liens.

(iii) To Obligors’ knowledge, the Material Intellectual Property does not violate any license or infringe any valid and enforceable Intellectual Property right of another.

(iv) Other than with respect to the Material Agreements, or as permitted by this Agreement, the Obligors have not assigned or otherwise transferred ownership of, or agreed to assign or otherwise transfer ownership of, any Material Intellectual Property, in whole or in part, to any Person who is not an Obligor.

(v) Other than as set forth on Schedule 7.05(b), the Obligors have not received any written communications, nor is there any pending or, to each Obligor’s knowledge, threatened action in writing, suit, proceeding or claim in writing by another, alleging that any of the Obligors has violated, infringed, diluted or misappropriated any Intellectual Property of another.

(vi) There is no pending or, to any Obligor’s knowledge, threatened action in writing, suit, proceeding or claim in writing by another: (a) challenging an Obligor’s rights in or to any

Material Intellectual Property owned by such Obligor; or (b) challenging the validity, enforceability or scope of any Material Intellectual Property owned by an Obligor.

(vii) Each Obligor has taken commercially reasonable precautions to protect the secrecy, confidentiality and value of the Material Intellectual Property (including without limitation, by requiring that all relevant current and former employees, contractors and consultants of the Obligors execute written confidentiality and invention assignment Contracts).

(viii) Each Obligor has complied with the material terms of each Material Agreement pursuant to which Intellectual Property has been licensed to the Obligors (which material terms shall include, but not be limited to, pricing and duration of the agreement).

(ix) All maintenance fees, annuities, and the like due or payable on the Patents within Material Intellectual Property have been timely paid or the failure to so pay was the result of an intentional decision by the applicable Obligor, which would not reasonably be expected to result in a Material Adverse Change. All documents and instruments necessary to register or apply for or renew registration of all Patents, Trademarks and Copyrights within the Material Intellectual Property have been validly executed, delivered and filed in a timely manner with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

(x) To each Obligor's knowledge, there are no material defects in any of the Patents within Material Intellectual Property and no such Patents within Material Intellectual Property have ever been finally adjudicated to be invalid, unpatentable or unenforceable for any reason in any administrative, arbitration, judicial or other proceeding.

(xi) To each Obligor's knowledge, no Obligor has received any written notice asserting that the Patents within the Material Intellectual Property are invalid, unpatentable or unenforceable and, to each Obligor's knowledge, no Obligor has engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate or render unpatentable or unenforceable any such Patent within the Material Intellectual Property.

(xii) Each employee and consultant has signed a written agreement assigning to the applicable Obligor all intellectual property rights that are related to such Obligor's business as now conducted and as presently proposed to be conducted and confidentiality provisions protecting trade secrets and confidentiality information of the Obligors.

(xiii) To the knowledge of each Obligor, no third party is infringing upon or misappropriating, or violating any material license or agreement with such Obligor relating to any Material Intellectual Property.

Section 7.06. No Actions or Proceedings.

(a) *Litigation.* There is no litigation, investigation or enforcement proceeding pending or threatened in writing with respect to any Obligor by or before any Governmental Authority or arbitrator (i) that either individually or in the aggregate would reasonably be expected to have a Material Adverse Effect or (ii) that involves this Agreement or the Transactions.

(b) *Environmental Matters.* The operations and the real Property of the Obligors comply with all applicable Environmental Laws, except to the extent the failure to so comply, either individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. To each Obligor's knowledge, there have been no conditions, occurrences or release of Hazardous Materials which would reasonably be expected to have a Material Adverse Effect.

(c) *Labor Matters.* No Obligor has engaged in unfair labor practices and there are no pending or, to any Obligor's knowledge, threatened in writing labor actions, disputes, grievance or arbitration proceedings involving the employees of any Obligor, in each case that would reasonably be expected to have a Material Adverse Effect. There is no material strike or work stoppage in existence or threatened in writing against any Obligor.

Section 7.07. Compliance with Laws and Agreements. Each Obligor is in compliance with all Requirements of Law (including CLIA and Environmental Laws) and all Contracts binding upon it or its Property, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

Section 7.08. Taxes. Each Obligor has timely filed or caused to be filed all federal income and other material Tax returns and reports required to have been filed and has paid or caused to be paid all federal income and other material Taxes required to have been paid by it, except Taxes that are being contested in good faith by appropriate proceedings and for which such Obligor has set aside on its books adequate reserves with respect thereto substantially in accordance with GAAP.

Section 7.09. Full Disclosure. Borrower has disclosed to the Lenders all Material Agreements to which any Obligor is party, and all other matters to its knowledge, that, individually or in the aggregate, would reasonably be expected to result in a Material Adverse Effect. None of the reports, financial statements, certificates or other information furnished by or on behalf of the Obligors to the Lenders in connection with the negotiation of this Agreement and the other Loan Documents or delivered hereunder or thereunder (as modified or supplemented by other information so furnished) contains any material misstatement of material fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

Section 7.10. Regulation.

(a) *Investment Company Act.* No Obligor is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940.

(b) *Margin Stock.* No Obligor is engaged principally, or as one of its important activities, in the business of extending credit for the purpose, whether immediate, incidental or

ultimate, of buying or carrying Margin Stock, and no part of the proceeds of the Loans will be used to buy or carry any Margin Stock in violation of Regulation T, U or X.

Section 7.11. Solvency. The Obligors, on a consolidated basis, are and, immediately after giving effect to the Borrowings, the use of proceeds thereof, and the consummation of the Transactions, will be, Solvent.

Section 7.12. Subsidiaries. Except as set forth on Schedule 7.12 (as such Schedule may be updated by Borrower from time to time), Borrower has no direct or indirect Subsidiaries.

Section 7.13. Indebtedness and Liens. Set forth on Schedule 7.13A is a complete and correct list of all Permitted Indebtedness of each Obligor described in Section 9.01(b) as of the date hereof. Set forth on Schedule 7.13B is a complete and correct list of all Permitted Liens described in Section 9.02(b) granted by an Obligor with respect to its respective Property and outstanding as of the date hereof.

Section 7.14. Material Agreements. Set forth on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time) is a complete and correct list of (i) each Material Agreement and (ii) each Contract creating or evidencing any Material Indebtedness, together with a summary reference to the product or purpose of each such Material Agreement and such Contract, to which an Obligor is a party. Accurate and complete copies of each such Contract listed on such schedule have been made available to the Lenders. No Obligor is in default in any material respect under any such Material Agreement or such Contract creating or evidencing any Material Indebtedness listed on such schedule, and no Obligor has knowledge of any default in any material respect by any counterparty to such Material Agreement or such Contract. Except as otherwise disclosed on Schedule 7.14 (as such Schedule may be updated by Borrower from time to time), all material vendor purchase agreements and provider Contracts of the Obligors, and all Material Agreements including a grant of rights under any Intellectual Property to an Obligor, are in full force and effect without material modification from the form in which the same were disclosed to the Lenders.

Section 7.15. Restrictive Agreements. None of the Obligors is party to any Restrictive Agreement, except (i) those listed on Schedule 7.15 or otherwise permitted under Section 9.11, (ii) restrictions and conditions imposed by Law or by the Loan Documents, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor and (iv) limitations associated with Permitted Liens.

Section 7.16. Real Property. No Obligor or any of its Subsidiaries owns or leases (as tenant thereof) any real Property on the date hereof, except as described on Schedule 7.16.

Section 7.17. Pension and Other Plans. Schedule 7.17 sets forth, as of the date hereof, a complete and correct list of, and that separately identifies, (a) all Title IV Plans, (b) all Multiemployer Plans and (c) all material Benefit Plans. Each Benefit Plan, and each trust thereunder, intended to qualify for Tax exempt status under Section 401 or 501 of the Code or other Requirements of Law so qualifies. Except for those that would not, in the aggregate, have a Material Adverse Effect, (x) each Benefit Plan is in compliance with applicable provisions of

ERISA, the Code and other Requirements of Law, (y) there are no existing or pending (or to the knowledge of any Obligor or Subsidiary thereof, threatened) claims (other than routine claims for benefits in the normal course), sanctions, actions, lawsuits or other proceedings or investigation involving any Benefit Plan to which any Obligor or Subsidiary thereof incurs or otherwise has or would have an obligation or any liability or Claim and (z) no ERISA Event is reasonably expected to occur. Borrower and each of its ERISA Affiliates has met all applicable requirements under the ERISA Funding Rules with respect to each Title IV Plan, and no waiver of the minimum funding standards under the ERISA Funding Rules has been applied for or obtained. As of the most recent valuation date for any Title IV Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is at least 60%, and neither Borrower nor any of its ERISA Affiliates knows of any facts or circumstances that would reasonably be expected to cause the funding target attainment percentage to fall below 60% as of the most recent valuation date. As of the date hereof, no ERISA Event has occurred in connection with which obligations and liabilities (contingent or otherwise) remain outstanding. No ERISA Affiliate would have any Withdrawal Liability as a result of a complete withdrawal from any Multiemployer Plan on the date this representation is made.

Section 7.18. Collateral; Security Interest. Each Security Document is effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral subject thereto and each such security interest is perfected to the extent required by (and has the priority required by) the applicable Security Document, subject to Permitted Liens. The Security Documents collectively are effective to create in favor of the Administrative Agent for the benefit of the Lenders a legal, valid and enforceable security interest in the Collateral, which upon the filing of financing statements and other similar statements filed in the appropriate offices, such security interests are perfected security interests (subject only to Permitted Liens) to the extent that such perfection may be obtained by such filing.

Section 7.19. Capitalization. All of the issued and outstanding securities of each Obligor have been duly authorized, are validly issued, fully paid, and non-assessable. As of the Closing Date and except as set forth on Schedule 7.19, there are no outstanding or authorized options, warrants, purchase rights, subscription rights, conversion rights, exchange rights, or other contracts or commitments that could require the Obligors to issue, sell, or otherwise cause to become outstanding any of their ownership interests. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, or similar rights with respect to the Obligors. None of the Equity Interests in any Obligor has been mortgaged, assigned or pledged in favor of any Person, other than pursuant to the Security Agreement.

Section 7.20. Insurance. Each Obligor has obtained (and is maintaining), insurance for its assets (including the Collateral) and business as required under the Loan Documents.

Section 7.21. Certain Fees. Except as described on Schedule 7.21, no broker's or finder's fee will be payable in connection with the execution and delivery of this Agreement.

Section 7.22. Sanctions Laws. Obligor and, to the knowledge of the Obligor, any director, officer or employee of an Obligor acting on behalf of the Obligor, are in compliance with the Sanctions Laws.

Section 7.23. Anti-Corruption Laws. No Obligor nor any of its Subsidiaries has, nor, to the knowledge of any Responsible Officer of any Obligor, has any director, officer, agent or employee of any Obligor acting on behalf of such Obligor (i) taken any action, directly or indirectly, that would result in a violation by such Persons of the Anti-Corruption Laws, (ii) made, offered to make, promised to make or authorized the payment or giving of, directly or indirectly, any Prohibited Payment or (iii) been subject to any investigation by any Governmental Authority with regard to any actual or alleged Prohibited Payment.

Section 7.24. Anti-Terrorism Laws. The Obligor (i) have taken reasonable measures to ensure compliance with applicable Economic Sanctions Laws and Anti-Terrorism Laws, (ii) are not Designated Persons and (iii) have not used any part of the proceeds from any advance on behalf of any Designated Person or has not used, directly by it or indirectly through any Subsidiary, such proceeds in connection with any investment in, or any transactions or dealings with, any Designated Person.

ARTICLE 8

AFFIRMATIVE COVENANTS AND FINANCIAL COVENANTS

Each Obligor covenants and agrees with the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 8.01. Financial Statements and Other Information. It will furnish to the Administrative Agent for distribution to the Lenders:

(a) as soon as available and in any event within thirty-five (35) days after the end of each month prior to a Qualified Public Offering, the consolidated balance sheet of the Obligor as of the end of each such month, and the related consolidated statements of income and cash flows of the Obligor for such month and the portion of the fiscal year through the end of such month, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligor as at such date and the results of operations of the Obligor for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal, quarterly or year-end adjustments and except for the absence of notes;

(b) as soon as available and in any event within forty-five (45) days after the end of the first three fiscal quarters of each fiscal year, the consolidated balance sheet of

the Obligors as of the end of such quarter, and the related consolidated statements of income and cash flows of the Obligors for such quarter and the portion of the fiscal year through the end of such quarter, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with (i) a certificate of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of the Obligors as at such date and the results of operations of the Obligors for the period ended on such date and have been prepared substantially in accordance with GAAP consistently applied, subject to changes resulting from normal quarterly or year-end adjustments and except for the absence of footnotes and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Quarterly Report on Form 10-Q with the SEC shall be deemed to satisfy the requirements of this Section 8.01(b) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(c) as soon as available and in any event within one hundred fifty (150) days after the end of each fiscal year, the consolidated balance sheet of the Obligors as of the end of such fiscal year, and the related consolidated statements of income, shareholders' equity and cash flows of the Obligors for such fiscal year, prepared substantially in accordance with GAAP consistently applied, all in reasonable detail and setting forth in comparative form the figures for the previous fiscal year, accompanied by (i) a report and opinion thereon of Cohn Reznick LLP or another independent certified public accountant acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any "going concern" or like qualification or exception (other than solely with respect to, or expressly resulting solely from, the repayment of the Loans on the Stated Maturity Date) or any qualification or exception as to the scope of such audit and (ii) a management's discussion and analysis of the financial condition and results of operations, including the Obligors' liquidity and capital resources; *provided* that, if the Borrower is a Publicly Reporting Company, the Borrower's filing of a Yearly Report on Form 10-K with the SEC shall be deemed to satisfy the requirements of this Section 8.01(c) on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(d) within thirty-five (35) days after the end of each month, a compliance certificate of a Responsible Officer of Borrower as of the end of the applicable accounting period (which delivery may, unless a Lender requests executed originals, be by electronic communication including email and shall be deemed to be an original authentic counterpart thereof for all purposes) in the form of Exhibit E (a "*Compliance Certificate*") which, for purposes of clarification, shall (i) demonstrate the Obligors' compliance with Section 8.15(a) in respect of such month, (ii) for each month end that coincides with the end of a fiscal quarter of Borrower, state that the representations and warranties made by the Obligors in Article 7 are true in all material respects on and as of the date thereof; *provided* that to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as

of such earlier date; *provided further* that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualification therein) in all respects, (iii) for each month end that coincides with the end of a fiscal quarter of Borrower, demonstrate Borrower’s compliance with Section 8.15(b) in respect of such fiscal quarter and (iv) for each month end that coincides with the end of a fiscal year of Borrower, provide Obligor’s updated Schedules to this Agreement (if any);

(e) promptly, and in any event within five (5) Business Days after receipt thereof by an Obligor, copies of each notice or other correspondence received from any securities regulator or exchange to the authority of which an Obligor is subject concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of such Obligor;

(f) the information regarding insurance maintained by the Obligors as and when required under Section 8.05;

(g) promptly following the Lenders’ written request at any time, proof of the Obligors’ compliance with Section 8.15(a);

(h) within ten (10) days of delivery, copies of all periodic reports distributed by Borrower to its shareholders generally; *provided* that (i) any such material may be redacted by Borrower to exclude information relating to the Loan Documents or the Lenders and (ii) the Lenders shall not be entitled to receive statements, reports and notices relating to topics that (x) are subject to attorney-client privilege or (y) present a conflict of interest for the Lenders;

(i) a financial forecast for the Obligors for each fiscal year, including forecasted balance sheets, statements of income and cash flows of the Obligors, all of which shall be prepared on a consolidated basis and delivered not later than February 28 of such fiscal year;

(j) promptly following any Lender’s written request, certification that such Obligor is not a passive foreign investment company (“PFIC”) within the meaning of Sections 1291 through 1297 of the Code, or, if such Obligor determines that it is a PFIC, such information as would allow the Lender to make a qualified electing fund election with respect to the stock of the Obligor;

(k) after Borrower becomes a Publicly Reporting Company, within five (5) Business Days of filing, provide access (via posting and/or links on Borrower’s web site) to all reports on Form 10-K and Form 10-Q filed with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange; and within five (5) Business Days of filing, provide notice and access (via posting and/or links on Borrower’s web site) to all reports on Form 8-K filed with the SEC, and copies of (or access to, via posting and/or links on Borrower’s web site) all other reports, proxy statements and other materials filed by Borrower with the

SEC, any Governmental Authority succeeding to any of the functions of the SEC or with any national securities exchange;

(l) promptly after the receipt thereof, a copy of any “management letter” received from its certified public accounts and the management’s response thereto; and

(m) such other information respecting the operations, properties, business or condition (financial or otherwise) of the Obligor (including with respect to the Collateral) as the Lenders may from time to time reasonably request.

Section 8.02. Notices of Material Events. It will furnish to the Administrative Agent for distribution to the Lenders written notice of the following promptly after a Responsible Officer of an Obligor first learns of the existence of:

(a) the occurrence of any Default or Event of Default;

(b) the occurrence of any event with respect to any Obligor’s Property resulting in a Loss, to the extent not covered by insurance, aggregating \$250,000 or more;

(c) (i) any proposed Acquisition by any Obligor that would reasonably be expected to result in environmental liability under Environmental Laws in excess of \$250,000, and (ii) in each case, to the extent that any of the following would reasonably be expected to result in liability in excess of \$250,000: (A) spillage, leakage, discharge, disposal, leaching, migration or release of any Hazardous Material required to be reported to any Governmental Authority under applicable Environmental Laws, and (B) all actions, suits, claims, notices of violation, hearings, investigations or proceedings pending, or threatened in writing against or affecting any Obligor or any of its Subsidiaries or with respect to the ownership, use, maintenance and operation of their respective businesses, operations or properties, relating to Environmental Laws or Hazardous Material;

(d) the assertion of any environmental matter by any Person in writing against, or with respect to the activities of, any Obligor or any of its Subsidiaries and any alleged violation of or non-compliance with any Environmental Laws or any permits, licenses or authorizations, in each case, which would reasonably be expected to involve damages in excess of \$250,000 other than any environmental matter or alleged violation that, if adversely determined, would not (either individually or in the aggregate) have a Material Adverse Effect;

(e) the filing or commencement of any action, suit or proceeding by or before any arbitrator or Governmental Authority against or directly affecting any Obligor or any of its Subsidiaries, in each case, that would reasonably be expected to result in a Material Adverse Effect;

(f) (i) on or prior to any filing by any ERISA Affiliate of any notice of intent to terminate any Title IV Plan, a copy of such notice and (ii) promptly, and in any event

within ten (10) days, after any Responsible Officer of any ERISA Affiliate knows or has reason to know that a request for a minimum funding waiver under Section 412 of the Code has been filed with respect to any Title IV Plan or Multiemployer Plan, a notice (which may be made by telephone if promptly confirmed in writing) describing such waiver request and any action that any ERISA Affiliate proposes to take with respect thereto, together with a copy of any notice filed with the PBGC or the IRS pertaining thereto;

(g) within five (5) Business Days of obtaining written notice or knowledge thereof, (i) the termination of any Material Agreement; (ii) the receipt by any Obligor or any of its Subsidiaries of a written notice under any Material Agreement (and a copy thereof) asserting a default by such Obligor or any of its Subsidiaries where such alleged default would permit such counterparty to terminate such Material Agreement; (iii) the entering into any new Material Agreement by an Obligor (and a copy thereof); or (iv) any amendment to a Material Agreement that would be materially adverse to the Lenders (and a copy thereof) (which includes, but is not limited to, any amendments to provisions relating to pricing and term), *provided* that notices required under this subsection (g) may be delivered with Borrower's monthly Compliance Certificate unless any of the foregoing events would reasonably be expected to have a Material Adverse Effect;

(h) any product recalls, safety alerts, corrections, withdrawals, marketing suspensions, removals or the like conducted, to be undertaken or issued by any Obligor or any of its Subsidiaries, whether or not at the request, demand or order of any Governmental Authority;

(i) within five (5) Business Days of obtaining written notice or knowledge thereof, any infringement or other violation by any Person of any Obligor Intellectual Property that would reasonably be expected to result in a Material Adverse Effect;

(j) within five (5) Business Days of obtaining written notice or knowledge thereof, a material licensing agreement or arrangement entered into by any Obligor or any of its Subsidiaries in connection with any material infringement or alleged infringement of the Intellectual Property of another Person;

(k) within five (5) Business Days of obtaining written notice or knowledge thereof, any written claim by any Person that the conduct of any Obligor's (or any Subsidiary thereof) business, including the development, manufacture, use, sale or other commercialization of any product, infringes any Intellectual Property of such Person, except to the extent any such claim would not reasonably be expected to result in a Material Adverse Effect;

(l) the reports and notices as and when required by the Security Documents;

(m) within thirty (30) days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to Section 8.01, notice of any material change in accounting policies or financial reporting practices by the Obligors;

(n) promptly after the occurrence thereof, notice of any labor controversy resulting in or threatening to result in any strike, work stoppage, boycott, shutdown or other material labor disruption against or involving an Obligor (or any Subsidiary thereof);

(o) any other development that results in, or would reasonably be expected to result in, a Material Adverse Effect;

(p) concurrently with the delivery of financial statements under Section 8.01(a), (b) or (c), the creation or other acquisition of any Intellectual Property by any Obligor or any Subsidiary after the date hereof and during such prior fiscal year which is registered or becomes registered or the subject of an application for registration with the United States Copyright Office or the United States Patent and Trademark Office, as applicable, or with any other equivalent foreign Governmental Authority; and

(q) any change to any Obligor's ownership of Deposit Accounts, Securities Accounts and Commodity Accounts, by delivering to the Lenders an updated Schedule 7 to the Security Agreement setting forth a complete and correct list of all such accounts as of the date of such change.

Each notice delivered under this Section 8.02 shall be accompanied by a statement of a Responsible Officer of Borrower setting forth in reasonable detail the event or development requiring such notice and any action taken or proposed to be taken with respect thereto.

Notwithstanding any contrary provision of this Agreement or any other Loan Document (including, without limitation, Sections 8.01 and 8.02), until such time as the Administrative Agent provides written notice to Borrower that it no longer desires to receive information that constitutes material non-public information, Borrower shall provide any information required pursuant to the terms hereof, including any information that may be material non-public information, to the Administrative Agent; *provided*, that notwithstanding the foregoing, Borrower shall at all times comply with Section 8.01(d)(i)-(iii), 8.01(k) and 8.02(a).

Section 8.03. Existence; Maintenance of Properties, Etc. (a) It will, and will cause each of its Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence; *provided* that the foregoing shall not prohibit any merger, amalgamation, consolidation, liquidation or dissolution permitted under Section 9.03.

(b) It shall, and shall cause each of its Subsidiaries to, maintain and preserve all rights, licenses, permits, privileges and franchises material to the conduct of its business, and maintain and preserve all of its assets and properties necessary to the conduct of its business in good working order and condition, ordinary wear and tear and damage from casualty or condemnation excepted.

(c) It shall, and shall cause each of its Subsidiaries to, use commercially reasonable efforts to cause each new employee and contractor to execute and deliver a customary

confidentiality, non-disclosure and Intellectual Property assignment agreement that includes a waiver of moral rights.

Section 8.04. Payment of Obligations. It will, and will cause each of its Subsidiaries to, pay and discharge (i) all federal income and other material Taxes, fees, assessments and governmental charges or levies imposed upon it or upon its properties or assets prior to the date on which penalties attach thereto, and all lawful claims for labor, materials and supplies which, if unpaid, might become a Lien (other than a Permitted Lien) upon any properties or assets of any Obligor, except to the extent such Taxes, fees, assessments or governmental charges or levies, or such claims, are being contested in good faith by appropriate proceedings and are adequately reserved against substantially in accordance with GAAP, (ii) all lawful claims which, if unpaid, would by Law become a Lien upon its Property not constituting a Permitted Lien and (iii) all other obligations if the failure to discharge such obligation would reasonably be expected to result in a Material Adverse Effect.

Section 8.05. Insurance. At its own cost and expense, it will, and will cause each of its Subsidiaries, to obtain and maintain, with financially sound and reputable insurers, insurance of the kinds, and in the amounts, as are consistent with customary practices and standards of its industry in the same or similar locations, it being understood and agreed that the insurance held by the Obligors on the Closing Date is deemed to fulfill this requirement on the date hereof. All of the insurance policies required pursuant to this Section 8.05 will name the Administrative Agent as a “loss payee,” “additional insured” or “mortgagee,” as applicable and as its interests may appear. Borrower will use its commercially reasonable efforts to ensure, or to cause others to ensure, that all insurance policies required pursuant to this Section 8.05 shall provide that they shall not be terminated or cancelled nor shall any policy be materially changed in a manner adverse to the insured Person without at least thirty (30) days’ written notice to insured Person and the Administrative Agent. Receipt of notice of termination or cancellation of any such insurance policies shall entitle the Administrative Agent to renew any such policies, all in accordance with the first sentence of this Section 8.05 or otherwise to obtain similar insurance in place of such policies, in each case at the expense of Borrower (payable within three (3) Business Days of Borrower’s receipt of written demand therefor) and, unless an Event of Default has occurred and is continuing, with the prior written consent of Borrower (such consent not to be unreasonably withheld). The amount of any such expenses shall accrue interest at the Default Rate if not paid when due and shall constitute “Obligations.” All of the insurance policies required hereby will be evidenced by one or more certificates of insurance, together with appropriate loss payee or additional insured clauses or endorsements in favor of the Administrative Agent as required by this Section, delivered to the Administrative Agent on or before the Closing Date (or, with respect to such endorsements, within the time period set forth in Section 8.19) and at such other times as the Administrative Agent may request from time to time.

Section 8.06. Books and Records; Inspection Rights. It will, and will cause each of its Subsidiaries to, keep proper books of record and account in which full, true and correct entries are made of all dealings and transactions in relation to its business and activities. It will, and will cause each of its Subsidiaries to, permit any representatives designated by the Administrative Agent, upon reasonable prior notice and at reasonable times, to visit and inspect its properties, to

examine and make extracts from its books and records, and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times during normal business hours and with reasonable advance notice as the Administrative Agent may request. It will, and will cause each of its Subsidiaries to, pay all reasonable and documented out-of-pocket expenses incurred by the Administrative Agent (a) so long as no Default has occurred and is continuing, for no more than two (2) such inspections each calendar year and (b) during a continuing Default, all such inspections.

Section 8.07. Compliance with Laws. (a) It will, and will cause each of its Subsidiaries to, (i) comply in all material respects with all Requirements of Law (including Environmental Laws) and (ii) comply in all material respects with all terms of outstanding Indebtedness and all Material Agreements, except (other than with respect to Material Intellectual Property) where the failure to do so, individually or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect.

(b) Each Obligor will maintain, and will cause each of its Subsidiaries to maintain, all records required to be maintained by a Governmental Authority, except where failure to do so, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

Section 8.08. Licenses. It will, and will cause each of its Subsidiaries to, obtain and maintain all licenses, authorizations, consents, filings, exemptions, registrations and other Governmental Approvals necessary in connection with the execution, delivery and performance of the Loan Documents, the consummation of the Transactions or the operation and conduct of its business and ownership of its properties, except where failure to do so would not reasonably be expected to have a Material Adverse Effect.

Section 8.09. Action under Environmental Laws. It will, and will cause each of its Subsidiaries to, upon a Responsible Officer becoming aware of the release of any Hazardous Materials or the existence of any environmental liability under applicable Environmental Laws with respect to their respective businesses, operations or properties, take all actions, at their cost and expense, as shall be required by applicable Law to investigate and clean up the condition of their respective businesses, operations or properties, including all required removal, containment and remedial actions, and restore their respective businesses, operations or properties to a condition, in each case in material compliance with applicable Environmental Laws.

Section 8.10. Use of Proceeds. The proceeds of the Loans will be used only as provided in Section 2.05. No part of the proceeds of the Loans will be used, whether directly or indirectly, for any purpose that violates any of the Regulations of the Board of Governors of the Federal Reserve System, including Regulations T, U and X.

Section 8.11. Certain Obligations Respecting Subsidiaries; Further Assurances; Intellectual Property.

(a) *Subsidiaries.* It will take such action, and will cause each of its Subsidiaries to take such action, from time to time as shall be necessary to ensure that all Subsidiaries are

“Guarantors” hereunder. Without limiting the generality of the foregoing, in the event that any Obligor shall form or acquire any new Subsidiary, it and its Subsidiaries will promptly and in any event within fifteen (15) days (or such longer time as consented to by the Administrative Agent in writing) of the formation or Acquisition of such Subsidiary:

(i) cause such new Subsidiary to become a “Guarantor” hereunder, and a “Grantor” under the Security Documents, pursuant to a Guarantee Assumption Agreement;

(ii) take such action or cause such Subsidiary to take such action (including delivering such Equity Interests together with undated transfer powers executed in blank) as shall be necessary to create and perfect valid and enforceable first priority (subject to Permitted Priority Liens) Liens on substantially all of the personal Property of such new Subsidiary as collateral security for the obligations of such new Subsidiary hereunder;

(iii) to the extent that the parent of such Subsidiary is not a party to the Security Documents or has not otherwise pledged Equity Interests in its Subsidiaries in accordance with the terms of the Security Documents and this Agreement, cause the parent of such Subsidiary to execute and deliver a pledge agreement in favor of the Lenders, in respect of all outstanding issued shares of such Subsidiary; and

(iv) deliver such proof of corporate action, incumbency of officers, opinions of counsel and other documents as is consistent with those delivered by each Obligor pursuant to Section 6.01 or as the Majority Lenders shall have requested;

provided, that solely with respect to any Subsidiary that is an Immaterial Foreign Subsidiary, no such actions shall be required other than a pledge by owner of such Immaterial Foreign Subsidiary of 100% of the Equity Interests of such Immaterial Foreign Subsidiary, which pledge shall, at the Administrative Agent’s discretion be perfected under the Law of such Immaterial Foreign Subsidiary’s jurisdiction of formation. For the avoidance of doubt, in the event that any Subsidiary ceases to qualify as an Immaterial Foreign Subsidiary, it shall be required to comply with clauses (a)(i)-(iii) hereof as if it was formed or Acquired on the date it ceased to qualify as an Immaterial Foreign Subsidiary.

(b) *Further Assurances.* It will, and will cause each of its Subsidiaries to, take such action from time to time as shall reasonably be requested in writing by the Majority Lenders to effectuate the purposes and objectives of this Agreement. Without limiting the generality of the foregoing, it will, and will cause each Person that is required to be a Guarantor to, take such action from time to time (including executing and delivering such assignments, security agreements, control agreements and other instruments) as shall be reasonably requested in writing by the Majority Lenders to create, in favor of the Lenders, perfected security interests and Liens (subject to Permitted Liens) in substantially all of the personal Property of such Obligor as collateral security for the Obligations; *provided* that any such security interest or Lien shall be subject to the relevant requirements of the Security Documents.

(c) *Intellectual Property.* In the event that any Obligor creates, develops or acquires Obligor Intellectual Property during the term of this Agreement, then the provisions of this Agreement shall automatically apply thereto and any such Obligor Intellectual Property shall automatically constitute part of the Collateral under the Security Documents, without further action by any party, in each case from and after the date of such creation, development or acquisition (except that any representations or warranties of any Obligor shall apply to any such Obligor Intellectual Property only from and after the date, if any, subsequent to such acquisition that such representations and warranties are brought down or made anew as provided herein). In the event that any Obligor holds or acquires Obligor Intellectual Property during the term of this Agreement, then, upon the request of the Administrative Agent, such Obligor shall take any action as shall be reasonably necessary and reasonably requested by the Administrative Agent to ensure that the provisions of this Agreement and the Security Agreement shall apply thereto and any such Obligor Intellectual Property shall constitute part of the Collateral under the Security Documents

Section 8.12. Termination of Non-Permitted Liens. In the event that any Responsible Officer of Borrower shall become aware or be notified by the Lenders of the existence of any outstanding Lien against any Property of any Obligor, which Lien is not a Permitted Lien, such Obligor shall use its best efforts to promptly terminate or cause the termination of such Lien.

Section 8.13. Non-Consolidation. It will, and will cause each of its Subsidiaries to, (i) maintain entity records and books of account separate from those of any other entity which is an Affiliate of such entity; and (ii) not commingle its funds or assets with those of any other entity which is an Affiliate of such entity.

Section 8.14. Anti-Terrorism and Anti-Corruption Laws. No Obligor shall engage in any transaction that violates any of the applicable prohibitions set forth in any Economic Sanctions Law, Anti-Terrorism Law, or the *US Foreign Corrupt Practices Act of 1977* (15 USC. §§ 78dd-1 *et seq.*). None of the funds or assets of such Obligor or any Subsidiary that are used to repay the Loans shall constitute property of, or shall be beneficially owned by, any Designated Person or, to such Obligor's knowledge, be the direct proceeds derived from any transactions that violate the prohibitions set forth in any applicable Economic Sanctions Law, and no Designated Person shall have any direct or indirect interest in such Obligor insofar as such interest would violate any Economic Sanctions Laws applicable to such Obligor.

Section 8.15. Financial Covenants.

(a) *Minimum Liquidity.* Borrower shall ensure that the Obligors shall have aggregate Unrestricted Cash of not less than \$3,000,000 at all times.

(b) *Minimum Total Revenue.* As of the end of the fiscal quarter ended June 30, 2021 and each fiscal quarter thereafter, the Obligors shall maintain, on a consolidated basis, Total Revenue for the twelve (12) month period most recently ended on such date of not less than the amount set forth in the table below:

<i>Twelve-Month Period Ended</i>	<i>Minimum Total Revenue</i>
June 30, 2021	\$15,017,000
September 30, 2021	\$16,844,000
December 31, 2021	\$19,482,000
March 31, 2022	\$22,988,000
June 30, 2022	\$27,455,000
September 30, 2022	\$32,305,000
December 31, 2022	\$37,938,000
March 31, 2023	\$42,076,000
June 30, 2023	\$46,752,000
September 30, 2023	\$51,562,000
December 31, 2023	\$56,730,000
March 31, 2024	\$62,891,000
June 30, 2024	\$69,064,000
September 30, 2024	\$74,442,000
December 31, 2024	\$79,227,000
March 31, 2025	\$85,526,000
June 30, 2025	\$92,295,000
September 30, 2025	\$99,058,000
December 31, 2025	\$106,016,000

Section 8.16. Maintenance of Material ~~Contracts~~Agreements, Intellectual Property, Etc. Such Obligor will, and will cause each of its Subsidiaries (to the extent applicable) to: (i) maintain in full force and effect for the term thereof all Material Agreements, or other rights necessary for the current operations of such Obligor's or such Subsidiary's business, as the case may be and (ii) maintain in full force and effect all Material Intellectual Property owned or controlled by such Obligor or any such Subsidiary that is used in and necessary for the current operations of such Obligor's or such Subsidiary's business, as the case may be; provided that Borrower may terminate the Supply Agreement in accordance with its terms if such termination would not be reasonably expected to adversely affect the Lenders in any material respect.

Section 8.17. Cash Management. It will:

(a) subject to Section 8.19, maintain all Deposit Accounts, Securities Accounts, Commodity Accounts and lockboxes (other than Excluded Accounts) with a bank or financial institution that has executed and delivered to the Administrative Agent an account control agreement, in form and substance reasonably acceptable to the Administrative Agent (each such Deposit Account, Securities Account, Commodity Account and lockbox, a “*Controlled Account*”); and

(b) deposit promptly, and in any event no later than five (5) Business Days after the date of receipt thereof, all cash, checks, drafts or other similar items of payment relating to or constituting payments made in respect of any and all accounts and other rights and interests into Controlled Accounts.

Section 8.18. Board Observer Rights Until the Obligations have been paid in full in cash, Borrower shall permit the Administrative Agent on behalf of all of the Lenders (the “*Observer*”) to attend and observe (but not vote) at all meetings of Borrower’s (or any Subsidiary’s, as applicable) Board or any Committee, whether in person, by telephone or otherwise as requested by the Observer. Borrower and such Subsidiaries shall notify the Observer in writing at the same time as furnished to members of the applicable Board or Committee of (i) the date and time for each general or special meeting of any such Board or Committee and (ii) the adoption of any resolutions or actions by any such Board or any such Committee by written consent (describing, in reasonable detail, the nature and substance of such action). Borrower and each of its Subsidiaries shall concurrently deliver to the Observer all notices and any materials delivered to the official members of such Board or Committee in connection with a meeting or action to be taken by written consent, including a draft of any material resolutions or actions proposed to be adopted by written consent. The Observer shall be free prior to such meeting or adoption by written consent to contact members of any applicable Board or Committee and discuss the pending actions to be taken. Notwithstanding the foregoing, the Observer shall not be entitled to receive materials relating to, or be in attendance for, any discussions relating to topics which (x) are subject to attorney client privilege or (y) present a conflict of interest for the Observer. All such discussions and materials shall be subject to the confidentiality provisions set forth in Section 13.17.

Section 8.19. Post-Closing Obligations. Within the time periods specified on Schedule 8.19 (as each may be extended by the Administrative Agent in its sole discretion), complete such undertakings as are set forth on Schedule 8.19.

ARTICLE 9

NEGATIVE COVENANTS

Each Obligor covenants and agrees with the Administrative Agent and the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than the Warrant Obligations and inchoate indemnity obligations) have been paid in full in cash:

Section 9.01. Indebtedness. It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Indebtedness, whether directly or indirectly, except:

- (a) the Obligations;
- (b) Indebtedness existing on the date hereof and set forth in Schedule 7.13A and Permitted Refinancings thereof;
- (c) accounts payable to trade creditors for goods and services and current operating liabilities (not the result of the borrowing of money) incurred in the Ordinary Course of Business;
- (d) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by it or any of its Subsidiaries in the Ordinary Course of Business;
- (e) unsecured Indebtedness of an Obligor to any other Obligor; *provided* such Indebtedness is pledged to the Administrative Agent for the benefit of the Lenders under the Security Agreement and otherwise subordinate in right of payment to the Obligations;
- (f) Guarantees by any Obligor of Indebtedness of any other Obligor;
- (g) purchase money Indebtedness and Capital Lease Obligations; *provided* that (i) if secured, the collateral therefor consists solely of the assets being financed, the products and proceeds thereof and books and records related thereto, (ii) in the case of purchase money Indebtedness, such Indebtedness shall not constitute less than 75% of the aggregate consideration paid with respect to such asset, and (iii) the aggregate outstanding principal amount of such Indebtedness does not exceed \$1,000,000 at any time;
- (h) unsecured workers' compensation claims, payment obligations in connection with health, disability or other types of social security benefits, unemployment or other insurance obligations, reclamation and statutory obligations, in each case incurred in the Ordinary Course of Business;
- (i) Indebtedness under Hedging Agreements permitted pursuant to Section 9.05(f);
- (j) Indebtedness approved in advance in writing by the Majority Lenders;
- (k) Indebtedness of Borrower and its Subsidiaries with respect to corporate credit cards not to exceed \$250,000 at any time outstanding;
- (l) [Indebtedness of Borrower pursuant to the minimum purchase and termination fee provisions of the Supply Agreement](#); and

(4m) so long as no Default shall have occurred and is continuing at the time of such Indebtedness is incurred, or after giving effect thereto, other unsecured Indebtedness in an aggregate principal amount not to exceed \$500,000 at any time outstanding.

Section 9.02. *Liens.* It will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Lien on any Property now owned by it, except:

(a) Liens securing the Obligations;

(b) any Lien on any Property of any Obligor existing on the date hereof and set forth in Schedule 7.13B; *provided* that (i) no such Lien shall extend to any other Property of such Obligor and (ii) any such Lien shall secure only those obligations which it secures on the date hereof and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;

(c) Liens securing Indebtedness permitted under Section 9.01(g); *provided* that such Liens are restricted solely to the collateral described in Section 9.01(g);

(d) Liens imposed by Law which were incurred in the Ordinary Course of Business, including (but not limited to) carriers', warehousemen's, landlords' and mechanics' liens, liens relating to leasehold improvements and other similar liens arising in the Ordinary Course of Business and which (i) do not in the aggregate materially detract from the value of the Property subject thereto or materially impair the use thereof in the operations of the business of such Person or (ii) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing the forfeiture or sale of the Property subject to such liens and for which adequate reserves have been made if required substantially in accordance with GAAP;

(e) Liens, pledges or deposits made in the Ordinary Course of Business in connection with bids, contracts, leases, appeal bonds, workers' compensation, unemployment insurance or other similar social security legislation;

(f) Liens securing Taxes, assessments and other governmental charges, the payment of which is not yet due or is being contested in good faith by appropriate proceedings promptly initiated and diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made;

(g) servitudes, easements, rights of way, restrictions and other similar encumbrances on real Property imposed by applicable Laws and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of Property or minor imperfections in title thereto which, in the aggregate, are not material, and which do not in any case materially detract from the value of the Property subject thereto or interfere with the ordinary conduct of the business of any of the Obligors;

(h) bankers' liens, rights of setoff and similar Liens incurred in the Ordinary Course of Business and arising in connection with the Obligors' deposit accounts or

securities accounts held at financial institutions solely to secure payment of fees and similar costs and expenses of such financial institutions with respect to such accounts;

(i) Liens in connection with transfers permitted under Section 9.09;

(j) any judgment lien or lien arising from decrees or attachments not constituting an Event of Default;

(k) leases or subleases of real property granted in the Ordinary Course of Business, and leases, subleases, nonexclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the Ordinary Course of Business;

(l) Liens in favor of customs and revenue authorities arising as a matter of law to secure the payment of custom duties in connection with the importation of goods, not securing an amount in the aggregate in excess of \$100,000 at any given time;

(m) Liens on a deposit account of the Obligors and the cash and cash equivalents therein, in each case, securing Indebtedness described in Section 9.01(k); and

(n) Permitted Licenses solely to the extent that such Permitted License would constitute a Lien;

provided that no Lien otherwise permitted under any of the foregoing Sections 9.02 (excluding Sections 9.02(a) and 9.02(n)) shall apply to any Material Intellectual Property.

Section 9.03. Fundamental Changes and Acquisitions. It will not, and will not permit any of its Subsidiaries to, (i) enter into or consummate any transaction of merger, amalgamation or consolidation, including without limitation, a reverse-triangular merger, or other similar transaction or series of related transactions, (ii) liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution) (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws), (iii) make or consummate any Acquisition, (iv) make any initial public offering that is not a Qualified Public Offering or (v) sell or issue any Disqualified Equity Interests, except:

(a) Investments permitted under Section 9.05;

(b) Permitted Acquisitions for (i) aggregate cash consideration not to exceed \$2,000,000 and (ii) total consideration not to exceed \$5,000,000, in each case, for the course of this Agreement; ~~and~~

(c) the merger, amalgamation or consolidation of any Obligor with or into any other Obligor, *provided* that (i) if Borrower is a party to such merger, amalgamation or consolidation, Borrower shall be the surviving entity and (ii) if a Domestic Subsidiary is a party to such merger, amalgamation or consolidation with a Foreign Subsidiary, the Domestic Subsidiary shall be the surviving entity; and

(d) the purchase of the QIAGEN Patents pursuant to the Patent Purchase Agreement.

Section 9.04. Lines of Business. It will not, and will not permit any of its Subsidiaries to, engage to any material extent in any business other than the business engaged in on the date hereof by such Obligor, or a business reasonably related, incidental or complementary thereto or reasonable extensions thereof.

Section 9.05. Investments. It will not, and will not permit any of its Subsidiaries to, make, directly or indirectly, or permit to remain outstanding any Investments except:

- (a) Investments outstanding on the date hereof and identified in Schedule 9.05 and any modification, replacement, renewal or extension thereof to the extent not involving new or additional Investments;
- (b) operating deposit accounts with banks;
- (c) extensions of credit in the nature of accounts receivable or notes receivable arising from the sales of goods or services in the Ordinary Course of Business;
- (d) Permitted Cash Equivalent Investments;
- (e) (i) Investments consisting of 100% of the ownership of the Equity Interests of its Subsidiaries, (ii) intercompany Investments by Borrower or a Subsidiary in any Guarantor or (iii) Investments by Borrower or any Subsidiary acquired in connection with a Permitted Acquisition;
- (f) Hedging Agreements entered into in the ordinary course of any Obligor's financial planning solely to hedge interest rate risks (and not for speculative purposes) in respect of Permitted Indebtedness and in aggregate amount for all such Hedging Agreements not in excess of \$500,000;
- (g) Investments consisting of prepaid expenses, negotiable instruments held for collection or deposit, security deposits with utilities, landlords and other like Persons, and deposits in connection with workers' compensation and similar deposits, in each case made in the Ordinary Course of Business;
- (h) Investments received in connection with any Insolvency Proceedings in respect of any customers, suppliers or clients and in settlement of delinquent obligations of, and other disputes with, customers, suppliers or clients;
- (i) Investments permitted under Section 9.01(e) and Section 9.03;
- (j) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the Ordinary Course of Business;

(k) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board in an aggregate amount not to exceed \$100,000 for subclauses (i) and (ii) in any fiscal year;

(l) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, Investments in Immaterial Foreign Subsidiaries in an aggregate amount not to exceed \$250,000 in any fiscal year; and

(m) so long as no Default shall have occurred and is continuing at the time of such Investment, or after giving effect thereto, other Investments in an amount not to exceed \$100,000 in any fiscal year.

Section 9.06. Restricted Payments. It will not, and will not permit any of its Subsidiaries to, declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment, other than:

(a) dividends and stock splits with respect to any Equity Interests of Borrower or any of its Subsidiaries payable solely in additional shares of its Qualified Equity Interests;

(b) any Restricted Payment by a Subsidiary to Borrower;

(c) any purchase, redemption, retirement, or other Acquisition by Borrower or any of its Subsidiaries of shares of its capital stock or other Equity Interests with the proceeds received from a substantially concurrent issue of new shares of its capital stock or other Equity Interests;

(d) dividends paid by any Guarantor to any other Obligor;

(e) cashless exercises of options and warrants;

(f) repurchases pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, or similar plans in an aggregate amount not to exceed \$100,000 in any fiscal year;

(g) the making of cash payments in lieu of the issuance of fractional shares upon the conversion of convertible securities (or in connection with the exercise of warrants or similar securities) not to exceed \$25,000 in any fiscal year; and

(h) the issuance of the Warrant Certificate and cash payments made to redeem, purchase, repurchase or retire the Warrant Obligations in accordance with the terms of the Warrant Certificate.

Section 9.07. Payments of Indebtedness. It will not, and will not permit any of its Subsidiaries to, make any payments in respect of any Material Indebtedness other than (i) payments of the Obligations and (ii) so long as no Default has occurred and is continuing or would result therefrom, scheduled payments of other Permitted Indebtedness and, in the case of repayment of intercompany Indebtedness permitted in reliance upon Section 9.01(e), subject to any subordination agreement entered into in connection therewith.

Section 9.08. Change in Fiscal Year. It will not, and will not permit any of its Subsidiaries to, change the last day of its fiscal year from that in effect on the date hereof, without prior written notice to the Administrative Agent, except to change the fiscal year of a Subsidiary acquired in connection with a Permitted Acquisition to conform its fiscal year to that of Borrower.

Section 9.09. Sales of Assets, Etc. It will not, and will not permit any of its Subsidiaries to, sell, lease, exclusively license (in terms of geography or field of use), as a licensor, transfer (including in connection with any division or plan of division under Delaware law or any comparable event under a different jurisdiction's laws) or otherwise dispose of any of its Property (including accounts receivable and Equity Interests of Subsidiaries), or forgive, release or compromise any amount owed to any Obligor or any of its Subsidiaries, in each case, in one transaction or series of transactions (any thereof, an "Asset Sale"), except:

- (a) transfers of cash in the Ordinary Course of Business for equivalent value;
- (b) sales or leases of products and services in the Ordinary Course of Business on ordinary business terms;
- (c) the forgiveness, release or compromise of any amount owed to any Obligor in the Ordinary Course of Business;
- (d) entering into, or becoming bound, by a Permitted License to the extent not otherwise prohibited by this Agreement;
- (e) development and other collaborative arrangements where such arrangements provide for the license or disclosure of Patents, Trademarks, Copyrights or other Intellectual Property rights of any Obligor in the Ordinary Course of Business and consistent with general market practices where such license requires periodic payments based on per unit sales of a product over a period of time; *provided* that such licenses must be true licenses that do not result in a legal transfer of title of the licensed Property or otherwise constitute sales transactions in substance,;
- (f) a sale, lease, exclusive license, transfer or other disposition (including by way of abandonment, cancellation or trade-in) of any Property that is obsolete, worn out, surplus or no longer used or useful in connection with the business of the Obligors or with respect to which a newer and improved version is available;
- (g) dispositions resulting from Casualty Events;

(h) any transaction permitted under Section 9.02, 9.03, 9.05 and 9.20; and

(i) so long as no Default shall have occurred and is continuing at the time of such Asset Sale, or after giving effect thereto, Asset Sales of other property not to exceed \$250,000 in the aggregate per fiscal year.

Section 9.10. Transactions with Affiliates. It will not, and will not permit any of its Subsidiaries to, sell, lease, license or otherwise transfer any assets to, or purchase, lease, license or otherwise acquire any assets from, or otherwise engage in any other transactions with, any of its Affiliates, except:

(a) transactions between or among the Obligor;

(b) any transaction permitted under Section 9.01, 9.05, 9.06 or 9.09;

(c) customary compensation and indemnification of, and other employment arrangements with, directors, officers and employees of any Obligor in the Ordinary Course of Business;

(d) transactions upon fair and reasonable terms that are no less favorable to any Obligor than would be obtained in a comparable arm's-length transaction with a Person not an Affiliate;

(e) the transactions set forth on Schedule 9.10; and

(f) cash equity contributions by Borrower's investors in Borrower or its Subsidiaries (other than Disqualified Equity Interests).

Section 9.11. Restrictive Agreements. It will not, and will not permit any of its Subsidiaries to, directly or indirectly, enter into, incur or permit to exist any Restrictive Agreement other than (i) restrictions and conditions imposed by Law or by the Loan Documents, (ii) Restrictive Agreements listed on Schedule 7.15, (iii) any stockholder agreement or investor rights agreement, charter, by laws or other organizational documents of an Obligor or (iv) limitations associated with Permitted Liens or with any transaction permitted under Section 9.01, 9.03, 9.05, 9.06 or 9.09.

Section 9.12. Organizational Documents, Material Agreements. (a) It will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of any Organizational Document that would be reasonably expected to adversely affect the Lenders in any material respect, without the prior written consent of the Administrative Agent.

(b) It will not, and will not permit any of its Subsidiaries to (i) enter into any material waiver, amendment or modification of any Material Agreement (including, but not limited to, any amendments to provisions relating to pricing and term) that would be reasonably expected to adversely affect the Lenders in any material respect or (ii) take or omit to take any action that results in the termination of, or permits any other Person to terminate, any Material

Agreement or Material Intellectual Property that would be reasonably expected to adversely affect the Lenders in any material respect, without, in each case, the prior written consent of the Administrative Agent; provided that Borrower may terminate the Supply Agreement in accordance with its terms if such termination would not be reasonably expected to adversely affect the Lenders in any material respect.

Section 9.13. Operating Leases. It will not, and will not permit any of its Subsidiaries to, make any expenditures in respect of operating leases, except for:

(a) real estate operating leases entered into in the Ordinary Course of Business; and

(b) operating leases that would not cause the Obligor, on a consolidated basis, to make payments exceeding \$500,000 in any fiscal year.

Section 9.14. Sales and Leasebacks. Except as permitted by Section 9.01(g), it will not, and will not permit any of its Subsidiaries to, become liable, directly or indirectly, with respect to any lease, whether an operating lease or a Capital Lease Obligation, of any Property (whether real, personal, or mixed), whether now owned or hereafter acquired, which (i) any Obligor has sold or transferred or is to sell or transfer to any other Person and (ii) any Obligor intends to use for substantially the same purposes as Property which has been or is to be sold or transferred.

Section 9.15. Hazardous Material. It will not, and will not permit any of its Subsidiaries to, use, generate, manufacture, install, treat, release, store or dispose of any Hazardous Material, except in compliance with all applicable Environmental Laws or where the failure to comply would not reasonably be expected to result in a Material Adverse Change.

Section 9.16. Accounting Changes. It will not, and will not permit any of its Subsidiaries to, make any significant change in accounting treatment, except as required or permitted by GAAP.

Section 9.17. Compliance with ERISA. No ERISA Affiliate shall cause or suffer to exist (a) any event that would result in the imposition of a Lien with respect to any Title IV Plan or Multiemployer Plan or (b) any other ERISA Event that would, in the aggregate, have a Material Adverse Effect. No Obligor or any Subsidiary thereof shall cause or suffer to exist any event that could result in the imposition of a Lien with respect to any Benefit Plan that would have a Material Adverse Effect.

Section 9.18. Deposit Accounts. It will not, and will not permit any of its Subsidiaries to, establish or maintain any bank account that is not a Controlled Account (other than an Excluded Account) and will not, and will not permit any of its Subsidiaries to, deposit proceeds in a bank account that is not a Controlled Account; *provided*, up to two (2) months of payroll expenses may be on deposit in Excluded Accounts in the aggregate at any time.

Section 9.19. Outbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any outbound license or agreement unless such outbound license or agreement is a Permitted License.

Section 9.20. Inbound Licenses. It will not, and will not permit any of its Subsidiaries to, enter into or become bound by any inbound license or agreement (other than Permitted Licenses) unless (i) no Default has occurred and is continuing, (ii) such Obligor has provided written notice to the Administrative Agent of the material terms of such license or agreement with a description of its anticipated and projected impact on such Obligor's business or financial condition, and (iii) such Obligor has taken such commercially reasonable actions as the Administrative Agent may reasonably request to obtain the consent of, or waiver by, any Person whose consent or waiver is necessary for the Administrative Agent to be granted a valid and perfected security interest in such license or agreement allowing the Administrative Agent to fully exercise its rights under any of the Loan Documents in the event of a disposition or liquidation of the rights, assets or property that is the subject of such license or agreement; *provided* that the aggregate amounts to be paid under all such inbound licenses pursuant to this Section 9.20 shall not exceed an amount equal to \$1,000,000 per fiscal year.

ARTICLE 10

EVENTS OF DEFAULT

Section 10.01. Events of Default. Each of the following events shall constitute an "Event of Default":

(a) Borrower shall fail to pay any principal on the Loan when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise; or

(b) any Obligor shall fail to pay any Obligation (other than an amount referred to in Section 10.01(a)) when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three (3) Business Days; or

(c) any representation or warranty made by or on behalf of an Obligor or any of its Subsidiaries in or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, shall: (i) prove to have been incorrect when made or deemed made to the extent that such representation or warranty contains any materiality or Material Adverse Effect qualifier; or (ii) prove to have been incorrect in any material respect when made or deemed made to the extent that such representation or warranty does not otherwise contain any materiality or Material Adverse Effect qualifier; or

(d) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in Sections 8.01, 8.02, 8.03(a) (with respect to such Obligor's existence), 8.10, 8.11, 8.13, 8.15, 8.17, 8.18, 8.19 or Article 9; or

(e) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in Section 10.01(a), (b) or (d)) or any other Loan Document, and, in the case of any failure that is capable of cure, such failure shall continue unremedied for a period of thirty (30) or more days; or

(f) any Obligor shall fail to make any payment in respect of any Material Indebtedness, when and as the same shall become due and payable after giving effect to any applicable grace or cure period as originally provided by the terms of such Indebtedness; or

(g) (i) any material breach of, or "event of default" or similar event under, the Contract governing any Material Indebtedness shall occur and such breach or "event of default" or similar event shall continue unremedied, uncured or unwaived after a period of five (5) Business Days after the expiration of any cure period thereunder, or (ii) any event or condition occurs (A) that results in any Material Indebtedness becoming due prior to its scheduled maturity or (B) that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of such Material Indebtedness or any trustee or agent on its or their behalf to cause such Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; *provided* that this Section 10.01(h) shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the Property securing such Material Indebtedness; or

(h) any Obligor or any of its Subsidiaries:

(i) ceases to be Solvent, or generally does not or becomes unable to pay its debts or meet its liabilities as the same become due, or admits in writing its inability to pay its debts generally, or declares any general moratorium on its indebtedness, or proposes a compromise or arrangement or deed of company arrangement between it and any class of its creditors; or

(ii) shall (A) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (B) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in Section 10.01(i), (C) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or for a substantial part of its assets, (D) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (E) make a general assignment for the benefit of creditors or (F) take any action for the purpose of effecting any of the foregoing; or

(i) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of an Obligor or any Subsidiary of an Obligor or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for an Obligor or any Subsidiary of an Obligor or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for sixty (60) days or an order or decree approving or ordering any of the foregoing shall be entered; or

(j) one or more judgments for the payment of money in an aggregate amount in excess of \$250,000 (excluding any amounts covered by insurance as to which the applicable carrier has accepted coverage) shall be rendered against any Obligor or any combination thereof and the same shall remain undischarged for a period of forty-five (45) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of any Obligor to enforce any such judgment; or

(k) an ERISA Event shall have occurred that, when taken together with all other ERISA Events that have occurred, would reasonably be expected to result in liability of the Obligors and their Subsidiaries in an aggregate amount exceeding (i) \$250,000 in any year or (ii) \$500,000 for all periods until repayment of all Obligations (other than the Warrant Obligations); or

(l) a Change of Control shall have occurred; or

(m) a Material Adverse Change shall have occurred; or

(n) (i) any Lien created by any of the Security Documents shall at any time not constitute a valid and perfected Lien in favor of the Administrative Agent on Collateral with an aggregate value in excess of \$250,000, free and clear of all other Liens (other than Permitted Liens) except due to the action or inaction of the Administrative Agent or any Lender(s), (ii) except as permitted herein the Security Documents or any Guarantee of any of the Obligations shall for whatever reason cease to be in full force and effect, or (iii) any of the Security Documents or any Guarantee of any of the Obligations, or the enforceability thereof, shall be repudiated or contested by any Obligor.

Section 10.02. Remedies. (a) Upon the occurrence of any Event of Default, then, and in every such event (other than an Event of Default described in Section 10.01(h) or (i)), and at any time thereafter during the continuance of such event, the Majority Lenders may, by notice to Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other Obligations, shall become due and payable

immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(b) Upon the occurrence of any Event of Default described in Section 10.01(h) or (i), the Commitments shall automatically terminate and the principal amount of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations, shall automatically become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(c) If any Lender collects any money or property pursuant to this Article 10, they shall pay out the money or property in the order set forth in Section 4.01(b).

Section 10.03. Prepayment Premium and Redemption Price. For the avoidance of doubt, any Prepayment Premium (as a component of the Redemption Price) shall be due and payable at any time the Loans become due and payable prior to the Stated Maturity Date for any reason, whether due to acceleration pursuant to the terms of this Agreement (in which case it shall be due immediately, upon the giving of notice to Borrower in accordance with Section 10.02(a), or automatically, in accordance with Section 10.02(b)), by operation of law or otherwise (including, without limitation, on account of any bankruptcy filing), except as otherwise specified herein. In view of the impracticability and extreme difficulty of ascertaining the actual amount of damages to the Lenders or profits lost by the Lenders as a result of such acceleration, and by mutual agreement of the parties as to a reasonable estimation and calculation of the lost profits or damages of the Lenders, any Prepayment Premium shall be due and payable upon such date. Each Obligor hereby waives any defense to payment, whether such defense may be based in public policy, ambiguity, or otherwise. The Obligors and the Lenders acknowledge and agree that any Prepayment Premium due and payable in accordance with this Agreement shall not constitute unmaturing interest, whether under Section 502(b)(3) of the Bankruptcy Code or otherwise. Each Obligor further acknowledges and agrees, and waives any argument to the contrary, that payment of such amount does not constitute a penalty or an otherwise unenforceable or invalid obligation.

ARTICLE 11

GUARANTEE

Section 11.01. The Guarantee. The Guarantors hereby jointly and severally guarantee to the Administrative Agent and each Lender, and its successors and assigns, the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the principal of and interest on the Loans, all fees and other amounts and Obligations from time to time owing to the Administrative Agent and any Lender by Borrower under this Agreement or under any other Loan Document and by any other Obligor under any of the Loan Documents, in each case strictly in accordance with the terms thereof (such obligations being herein collectively called the “*Guaranteed Obligations*”). The Guarantors hereby further jointly and severally agree that if Borrower shall fail to pay in full when due (whether at stated maturity, by acceleration or

otherwise) any of the Guaranteed Obligations, the Guarantors will promptly pay the same, without any demand or notice whatsoever, and that in the case of any extension of time of payment or renewal of any of the Guaranteed Obligations, the same will be promptly paid in full when due (whether at extended maturity, by acceleration or otherwise) in accordance with the terms of such extension or renewal.

Section 11.02. Obligations Unconditional. The obligations of the Guarantors under Section 11.01 are absolute and unconditional, joint and several, irrespective of the value, genuineness, validity, regularity or enforceability of the obligations of Borrower under this Agreement or any other agreement or instrument referred to herein, or any substitution, release or exchange of any other guarantee of or security for any of the Guaranteed Obligations, and, to the fullest extent permitted by applicable Law, irrespective of any other circumstance whatsoever that might otherwise constitute a legal or equitable discharge or defense of a surety or Guarantor, it being the intent of this Section 11.02 that the obligations of the Guarantors hereunder shall be absolute and unconditional, joint and several, under any and all circumstances. Without limiting the generality of the foregoing, it is agreed that the occurrence of any one or more of the following shall not alter or impair the liability of the Guarantors hereunder, which shall remain absolute and unconditional as described above:

(a) at any time or from time to time, without notice to the Guarantors, the time for any performance of or compliance with any of the Guaranteed Obligations shall be extended, or such performance or compliance shall be waived;

(b) any of the acts mentioned in any of the provisions of this Agreement or any other agreement or instrument referred to herein shall be done or omitted;

(c) the maturity of any of the Guaranteed Obligations shall be accelerated, or any of the Guaranteed Obligations shall be modified, supplemented or amended in any respect, or any right under this Agreement or any other agreement or instrument referred to herein shall be waived or any other guarantee of any of the Guaranteed Obligations or any security therefor shall be released or exchanged in whole or in part or otherwise dealt with; or

(d) any lien or security interest granted to, or in favor of, any Lender as security for any of the Guaranteed Obligations shall fail to be perfected.

The Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that the Administrative Agent or any Lender exhaust any right, power or remedy or proceed against Borrower under this Agreement or any other agreement or instrument referred to herein, or against any other Person under any other guarantee of, or security for, any of the Guaranteed Obligations.

Section 11.03. Reinstatement. The obligations of the Guarantors under this Article 11 shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of Borrower in respect of the Guaranteed Obligations is rescinded or must be otherwise restored by any holder of any of the Guaranteed Obligations, whether as a result of any proceedings in

bankruptcy or reorganization or otherwise, and the Guarantors jointly and severally agree that they will indemnify the Administrative Agent and each Lender on demand for all reasonable out-of-pocket costs and expenses (including reasonable fees of counsel) incurred by such Persons in connection with such rescission or restoration, including any such reasonable out-of-pocket costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any bankruptcy, insolvency or similar Law.

Section 11.04. Subrogation. The Guarantors hereby jointly and severally agree that, until the payment and satisfaction in full of all Guaranteed Obligations (other than the Warrant Obligations) and the expiration and termination of the Commitments, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in Section 11.01, whether by subrogation or otherwise, against Borrower or any other guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations.

Section 11.05. Remedies. The Guarantors jointly and severally agree that, as between the Guarantors, on one hand, and the Lenders, on the other hand, the obligations of Borrower under this Agreement and under the other Loan Documents may be declared to be forthwith due and payable as provided in Article 10 (and shall be deemed to have become automatically due and payable in the circumstances provided in Article 10) for purposes of Section 11.01 notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Borrower and that, in the event of such declaration (or such obligations being deemed to have become automatically due and payable), such obligations (whether or not due and payable by Borrower) shall forthwith become due and payable by the Guarantors for purposes of Section 11.01.

Section 11.06. Instrument for the Payment of Money. Each Guarantor hereby acknowledges that the guarantee in this Article 11 constitutes an instrument for the payment of money, and consents and agrees that each Lender, at its sole option, in the event of a dispute by such Guarantor in the payment of any moneys due hereunder, shall have the right to proceed by motion for summary judgment in lieu of complaint pursuant to N.Y. Civ. Prac. L&R § 3213.

Section 11.07. Continuing Guarantee. The guarantee in this Article 11 is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

Section 11.08. Rights of Contribution. The Guarantors hereby agree, as between themselves, that if any Guarantor shall become an Excess Funding Guarantor (as defined below) by reason of the payment by such Guarantor of any Guaranteed Obligations, each other Guarantor shall, on demand of such Excess Funding Guarantor (but subject to the next sentence), pay to such Excess Funding Guarantor an amount equal to such Guarantor's Pro Rata Share (as defined below and determined, for this purpose, without reference to the properties, debts and liabilities of such Excess Funding Guarantor) of the Excess Payment (as defined below) in respect of such Guaranteed Obligations. The payment obligation of a Guarantor to any Excess Funding Guarantor under this Section 11.08 shall be subordinate and subject in right of payment to the prior payment in full of the obligations of such Guarantor under the other provisions of this

Article 11 and such Excess Funding Guarantor shall not exercise any right or remedy with respect to such excess until payment and satisfaction in full of all of such obligations.

For purposes of this Section 11.08, (i) “*Excess Funding Guarantor*” means, in respect of any Guaranteed Obligations, a Guarantor that has paid an amount in excess of its Pro Rata Share of such Guaranteed Obligations, (ii) “*Excess Payment*” means, in respect of any Guaranteed Obligations, the amount paid by an Excess Funding Guarantor in excess of its Pro Rata Share of such Guaranteed Obligations and (iii) “*Pro Rata Share*” means, as of the date of determination, for any Guarantor, the ratio (expressed as a percentage) of (x) the amount by which the aggregate present fair saleable value of all properties of such Guarantor (excluding any shares of stock of any other Guarantor) exceeds the amount of all the debts and liabilities of such Guarantor (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of such Guarantor hereunder and any obligations of any other Guarantor that have been Guaranteed by such Guarantor) to (y) the amount by which the aggregate fair saleable value of all properties of all of the Guarantors exceeds the amount of all the debts and liabilities (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of Borrower and the Guarantors hereunder and under the other Loan Documents) of all of the Guarantors, determined (A) with respect to any Guarantor that is a party hereto on the Closing Date, as of such date, and (B) with respect to any other Guarantor, as of the date such Guarantor becomes a Guarantor hereunder.

Section 11.09. General Limitation on Guarantee Obligations. In any action or proceeding involving any provincial, territorial or state corporate law, or any state or federal bankruptcy, insolvency, reorganization or other Law affecting the rights of creditors generally, if the obligations of any Guarantor under Section 11.01 would otherwise, taking into account the provisions of Section 11.08, be held or determined to be void, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under Section 11.01, then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Guarantor, the Administrative Agent, the Lenders or any other Person, be automatically limited and reduced to the highest amount that is valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding.

ARTICLE 12

ADMINISTRATIVE AGENT

Section 12.01. Appointment. Each of the Lenders hereby irrevocably appoints Perceptive to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article 12 are solely for the benefit of the Administrative Agent and the Lenders, and neither Borrower nor any other Obligor will have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents

(or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead, such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

Section 12.02. Rights as a Lender. The Person serving as the Administrative Agent hereunder will have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent, and the term “Lender” or “Lenders” will, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity to the extent such Person is a Lender. The Lenders acknowledge and agree that such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, Borrower, the other Obligors or any other Subsidiaries or Affiliates of the Obligors as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

Section 12.03. Exculpatory Provisions. (a) The Administrative Agent will not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder are administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

(i) will not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(ii) will not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Majority Lenders (or such other number or percentage of the Lenders as will be expressly provided for herein or in the other Loan Documents); *provided* that the Administrative Agent will not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including any action that may be in violation of the automatic stay under any Insolvency Proceeding; and

(iii) will not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and will not be liable for the failure to disclose, any information relating to the Obligors or any of its Subsidiaries or Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(b) The Administrative Agent will not be liable for any action taken or not taken by it (i) with the consent or at the request of the Majority Lenders (or such other number or percentage of the Lenders as will be necessary, or as the Administrative Agent believes in good faith will be necessary, under the circumstances), or (ii) in the absence of its own gross negligence or willful

misconduct as determined by a court of competent jurisdiction by final and non-appealable judgment. The Administrative Agent will be deemed not to have knowledge of any Default unless and until notice describing such Default is given to the Administrative Agent in writing by Borrower or a Lender.

(c) The Administrative Agent will not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Article 6 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

Section 12.04. Reliance by Administrative Agent. The Administrative Agent will be entitled to rely upon, and will not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and will not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of the Loans that by its terms must be fulfilled to the satisfaction of a Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender unless the Administrative Agent has received notice to the contrary from such Lender prior to the making of such Loans. The Administrative Agent may consult with legal counsel (who may be counsel for Borrower), independent accountants and other experts selected by it, and will not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

Section 12.05. Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by the Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Affiliates. The exculpatory provisions of this Section will apply to any such sub-agent and to the Affiliates of the Administrative Agent and any such sub-agent, and will apply to their respective activities in connection with the syndication of the facility as well as activities as Administrative Agent. The Administrative Agent will not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and non-appealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

Section 12.06. Resignation of Agent. (a) The Administrative Agent may at any time give notice of its resignation to the Lenders and Borrower, which notice shall set forth the effective date of such resignation (the “*Resignation Effective Date*”), such date not to be earlier than the thirtieth (30th) day following the date of such notice. The Majority Lenders and Borrower shall mutually agree upon a successor to the Administrative Agent. If the Majority Lenders and Borrower are unable to so mutually agree and no successor shall have been appointed within twenty-five (25) days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may (but will not be obligated to), on behalf of the Lenders, appoint a successor Administrative Agent it shall designate (in its reasonable discretion after consultation with Borrower and the Majority Lenders). Whether or not a successor has been appointed, such resignation will become effective in accordance with such notice on the Resignation Effective Date.

(b) With effect from the Resignation Effective Date (i) the retiring Administrative Agent will be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any Collateral held by the Administrative Agent on behalf of the Lenders under any of the Loan Documents, the retiring Administrative Agent will continue to hold such Collateral until such time as a successor Administrative Agent is appointed) and (ii) except for any indemnity payments owed to the retiring Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent will instead be made by or to each Lender directly, until such time, if any, as the Majority Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor’s appointment as Administrative Agent hereunder, such successor will succeed to and become vested with all of the rights, powers, privileges and duties of the retiring Administrative Agent (other than any rights to indemnity payments owed to the retiring Administrative Agent), and the retiring Administrative Agent will be discharged from all of its duties and obligations hereunder or under the other Loan Documents. The fees payable by Borrower to a successor Administrative Agent will be the same as those payable to its predecessor unless otherwise agreed between Borrower and such successor. After the retiring Administrative Agent’s resignation hereunder and under the other Loan Documents, the provisions of this Article 12 and Sections 13.03 and 13.06 will continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Affiliates in respect of any actions taken or omitted to be taken by any of them while the retiring Administrative Agent was acting as Administrative Agent.

Section 12.07. Non-Reliance on Administrative Agent and Other Lenders. Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Affiliates and based on such documents and information as it will from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

Section 12.08. Administrative Agent May File Proofs of Claim. In case of the pendency of any Insolvency Proceeding or any other judicial proceeding relative to Borrower, the Administrative Agent (irrespective of whether the principal of the Loans will then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent has made any demand on Borrower) will be entitled and empowered (but not obligated), by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans and all other Obligations that are owing and unpaid hereunder or under any other Loan Document and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the Lenders and the Administrative Agent and their respective agents and counsel and all other amounts due the Lenders and the Administrative Agent under this Agreement or any other Loan Document) allowed in such judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same.

Any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make any payments of the type described above in this Section 12.08 to the Administrative Agent and, in the event that the Administrative Agent consents to the making of such payments directly to the Lenders, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under this Agreement or any other Loan Document.

Section 12.09. Collateral and Guaranty Matters; Appointment of Administrative Agent. (a) Without limiting the provisions of Section 12.08, the Lenders irrevocably agree as follows:

(i) the Administrative Agent is authorized, at its option and in its discretion, to release any Lien on any property granted to or held by the Administrative Agent under any Loan Document (A) on the date when all Obligations have been satisfied in full in cash (other than Warrant Obligations and contingent obligations as to which no claims have been asserted), (B) that is sold or otherwise disposed of or to be sold or otherwise disposed of as part of or in connection with any sale or other disposition permitted under the Loan Documents, or (C) subject to Sections 13.01 and 13.04, if approved, authorized or ratified in writing by the Majority Lenders; and

(ii) the Administrative Agent is authorized, at its option and discretion, to release any Guarantor from its obligations hereunder if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Loan Documents.

Upon request by the Administrative Agent at any time, each Lender will confirm in writing the Administrative Agent's authority to release or subordinate its interest in particular

types or items of Collateral, or to release any Guarantor from its obligations under its guaranty pursuant to this Section 12.09.

(b) The Administrative Agent will not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Administrative Agent's Lien thereon, or any certificate prepared by any Obligor in connection therewith, nor will the Administrative Agent be responsible or liable to the Lenders for any failure to monitor or maintain any portion of the Collateral.

(c) Each Lender hereby appoints the Administrative Agent as its collateral agent under each of the Security Documents and agrees that, in so acting, the Administrative Agent will have all of the rights, protections, exculpations, indemnities and other benefits provided to the Administrative Agent under this Agreement, and hereby authorizes and directs the Administrative Agent, on behalf of such Lender and all Lenders, without the necessity of any notice to or further consent from any of the Lenders, from time to time to (i) take any action with respect to any Collateral or any Security Document which may be necessary to perfect and maintain perfected the Liens on the Collateral granted pursuant to any such Security Document or protect and preserve the Administrative Agent's ability to enforce the Liens or realize upon the Collateral, (ii) act as collateral agent for each Lender for purposes of acquiring, holding, enforcing and perfecting all Liens created by the Loan Documents and all other purposes stated therein, (iii) enter into intercreditor or subordination agreements, as the case may be, in connection with Indebtedness permitted pursuant to Sections 9.01(e) and 9.01(l), as applicable, (iv) enter into non-disturbance or similar agreements in connection with licensing agreements and arrangements permitted by this Agreement and the other Loan Documents and (v) otherwise to take or refrain from taking any and all action that the Administrative Agent shall deem necessary or advisable in fulfilling its role as collateral agent under any of the Security Documents.

ARTICLE 13

MISCELLANEOUS

Section 13.01. No Waiver. No failure on the part of the Administrative Agent or the Lenders to exercise and no delay in exercising, and no course of dealing with respect to, any right, power or privilege under any Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege under any Loan Document preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The remedies provided herein are cumulative and not exclusive of any remedies provided by Law.

Section 13.02. Notices. All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, the Loan Documents) shall be given or made in writing (including by telecopy or electronic mail) delivered, if to Borrower, another Obligor, the Administrative Agent or the Lenders, to its address specified on Schedule 2 hereto or its Guarantee Assumption Agreement,

as the case may be, or at such other address as shall be designated by such party in a notice to the other parties. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given upon receipt of a legible copy thereof, in each case given or addressed as aforesaid.

Section 13.03. Expenses, Indemnification .

(a) *Expenses.* Borrower agrees to pay or reimburse (i) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket costs and expenses (including the reasonable fees and expenses of Chapman and Cutler LLP, counsel to the Administrative Agent) in connection with (x) the negotiation, preparation, execution and delivery of this Agreement and the other Loan Documents and the making of the Loans (exclusive of post-closing costs); *provided* that, so long as the Borrowing of the Tranche A Loan is made, such fees shall be credited against the Expense Deposit paid by Borrower, (y) post-closing costs and (z) the negotiation or preparation of any amendment, modification, supplement or waiver of any of the terms of this Agreement or any of the other Loan Documents (whether or not consummated) and (ii) the Administrative Agent and the Lenders for all of their reasonable and documented out of pocket costs and expenses (including the reasonable fees and expenses of legal counsel) in connection with any enforcement or collection proceedings resulting from the occurrence of an Event of Default.

(b) *Indemnification.* Each Obligor hereby indemnifies the Administrative Agent, the Lenders, their respective Affiliates, and their respective directors, officers, employees, attorneys, agents and advisors (each, an “*Indemnified Party*”) from and against, and agrees to hold them harmless against, any and all Claims and Losses of any kind (including reasonable fees and disbursements of counsel), joint or several, that is incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to any investigation, litigation or proceeding or the preparation of any defense with respect thereto arising out of or in connection with or relating to this Agreement or any of the other Loan Documents or the Transactions or any use made or proposed to be made with the proceeds of the Loans, whether or not such investigation, litigation or proceeding is brought by an Obligor, any of its shareholders or creditors, an Indemnified Party or any other Person, or an Indemnified Party is otherwise a party thereto, and whether or not any of the conditions precedent set forth in Article 6 are satisfied or the other Transactions contemplated by this Agreement are consummated, except to the extent such Claim or Loss is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from any Indemnified Party’s gross negligence or willful misconduct. No Obligor shall assert any claim against any Indemnified Party, on any theory of liability, for consequential, indirect, special or punitive damages arising out of or otherwise relating to this Agreement or any of the other Loan Documents or any of the Transactions or the actual or proposed use of the proceeds of the Loans. This Section shall not apply to Taxes other than Taxes relating to a non-Tax Claim or Loss governed by this Section 13.03(b).

Section 13.04. Amendments. Except as otherwise expressly provided in this Agreement, any provision of this Agreement or any other Loan Document (except for the Warrant Certificate, which may be amended, modified, waived or supplemented in accordance with the terms thereof)

may be amended, modified, waived or supplemented only by an instrument in writing signed by Borrower, the Administrative Agent and the Majority Lenders; *provided* that:

(a) no amendment, waiver or consent shall, unless in writing and signed by all of the Lenders, do any of the following at any time:

(i) change the percentage of (x) the Commitments or (y) the aggregate unpaid principal amount of the Loans that, in each case, shall be required for the Lenders or any of them to take any action hereunder (including pursuant to any change to the definition of “*Majority Lenders*”);

(ii) release one or more Guarantors (or otherwise limit such Guarantors’ liability with respect to the Obligations owing to the Lenders under the Guarantees) if such release or limitation is in respect of all or substantially all of the value represented by the Guarantees to the Lenders;

(iii) release, or subordinate the Lenders’ Liens in, all or substantially all of the Collateral in any transaction or series of related transactions (other than in connection with any sale of Collateral permitted herein); or

(iv) amend any provision of this Section 13.04;

(b) no amendment, waiver or consent shall, unless in writing and signed by each Lender specified below for such amendment, waiver or consent:

(i) increase the Commitments of a Lender without the consent of such Lender;

(ii) reduce the principal of, or stated rate of interest on, or any Prepayment Premium payable on, the Loans owed to a Lender or any fees or other amounts stated to be payable hereunder or under the other Loan Documents to such Lender without the consent of such Lender;

(iii) postpone any date scheduled for any payment of principal of, or interest on, the Loans, any date scheduled for payment or for any date fixed for any payment of fees hereunder (excluding the due date of any mandatory prepayment of a Loan), in each case payable to a Lender without the consent of such Lender;

(iv) change the order of application of prepayment of the Loans from the application thereof set forth in the applicable provisions of Section 4.01(b)(ii) in any manner that adversely affects the Lenders without the consent of holders of a majority of the Commitments or Loans outstanding or otherwise change any provision requiring the pro rata distributions hereunder among the Lenders without all Lenders’ consent; or

(v) modify Section 2.02 without the consent of each Lender directly and adversely affected thereby.

Section 13.05. Successors and Assigns.

(a) *General.* The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that (i) no Obligor may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender (and any attempted assignment or transfer by such Obligor without such consent shall be null and void) and (ii) no Lender may assign or otherwise transfer its rights or obligations hereunder except in accordance with this Section. Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants (to the extent provided in paragraph (e) of this Section) and, to the extent expressly contemplated hereby, the Indemnified Parties of the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) *Amendments to Loan Documents; Majority Lender Vote.* Each of the Lenders and the Obligors agrees to enter into such amendments to the Loan Documents, and such additional Security Documents and other instruments and agreements, in each case in form and substance reasonably acceptable to the Lenders and the Obligors, as shall reasonably be necessary to implement and give effect to any assignment made by any Lender (or any direct or indirect assignee thereof) from time to time under this Section 13.05.

(c) *Assignments by Lenders.* (i) Subject to the conditions set forth in paragraph (c)(ii) below, any Lender may assign to one or more Persons (other than an Ineligible Assignee) all or a portion of its rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans at the time owing to it) with the prior written consent (such consent not to be unreasonably withheld) of the Administrative Agent, provided that no consent of the Administrative Agent shall be required for an assignment of any Commitment or of all or any portion of a Loan to a Lender, an Affiliate of a Lender or an Approved Fund.

(ii) Assignments shall be subject to the following additional conditions:

(A) except in the case of an assignment to a Lender or an Affiliate of a Lender or an assignment of the entire remaining amount of the assigning Lender's Commitment or Loans, the amount of the Commitment or Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment Agreement with respect to such assignment is delivered to the Administrative Agent) shall not be less than \$500,000, unless the Administrative Agent otherwise consents;

(B) each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement and the other Loan Documents; and

(C) the parties to each assignment shall execute and deliver to the Administrative Agent (with a copy to the Borrower, *provided* that the failure to give such copy to the Borrower shall not affect the validity of such Assignment Agreement) an Assignment Agreement in form and substance reasonably satisfactory to Administrative Agent.

(iii) Subject to acceptance and recording thereof pursuant to paragraph (d) of this Section, from and after the effective date specified in each Assignment Agreement, the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment Agreement, have the rights and obligations of a Lender under the Loan Documents, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment Agreement, be released from its obligations under the Loan Documents (and, in the case of an Assignment Agreement covering all of the assigning Lender's rights and obligations under the Loan Documents, such Lender shall cease to be a party hereto). Any assignment or transfer by a Lender of rights or obligations under the Loan Documents that does not comply with this Section 13.05 shall be treated for purposes of the Loan Documents as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (e) of this Section.

(d) *Register.* The Administrative Agent, acting for this purpose as a non-fiduciary agent of Borrower, shall maintain at one of its offices a copy of each Assignment Agreement delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "*Register*"). The entries in the Register shall be conclusive absent manifest error, and Borrower, the Administrative Agent, and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice. No assignment shall be effective for purposes of this Agreement unless (i) it has been recorded in the Register as provided in this paragraph and (ii) any written consent to such assignment required by paragraph (b) of this Section has been obtained.

(e) *Participations.* Any Lender may at any time, without the consent of, or notice to, Borrower, sell participations to any Person (a "*Participant*"), other than an Ineligible Assignee, in all or a portion of such Lender's rights and obligations under the Loan Documents (including all or a portion of its Commitment and the Loans owing to it); *provided* that (i) such Lender's obligations under the Loan Documents shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) Borrower shall continue to deal solely and directly with such Lender in connection therewith.

(f) Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver that would (i) increase or extend the term of such Lender's Commitment, (ii) extend the date fixed for the payment of principal of or

interest on the Loans or any portion of any fee hereunder payable to the Participant, (iii) reduce the amount of any such payment of principal, or (iv) reduce the rate at which interest is payable thereon to a level below the rate at which the Participant is entitled to receive such interest. Borrower agrees that each Participant shall be entitled to the benefits of Section 5.03 (subject to the requirements and limitations therein, including the requirements under Section 5.03(f) (it being understood that the documentation required under Section 5.03(f) shall be delivered to Borrower and the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 13.05(a), *provided* that such Participant (A) agrees to be subject to the provisions of Section 5.03(h) as if it were an assignee under Section 13.05(a); and (B) shall not be entitled to receive any greater payment under Section 5.03, with respect to any participation, than its participating Lender would have been entitled to receive, unless the sale of the participation to such Participant is made with Borrower's prior written consent. To the extent permitted by Law, each Participant also shall be entitled to the benefits of Section 4.04(a) as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "*Participant Register*"); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(g) *Certain Pledges.* Subject to Section 13.05(d), the Lenders may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement and any other Loan Document to secure obligations of the Lenders, including any pledge or assignment to secure obligations to a Federal Reserve Bank or another central bank; *provided* that no such pledge or assignment shall release the Lenders from any of their obligations hereunder or substitute any such pledgee or assignee for the Lenders as a party hereto.

Section 13.06. Survival. The obligations of Borrower under Sections 5.01, 5.02, 5.03, 13.03, 13.05, 13.09, 13.10, 13.11, 13.12, 13.13, 13.14 and Article 11 (solely to the extent guaranteeing any of the obligations under the foregoing Sections) shall survive the repayment of the Obligations and the termination of the Commitments and, in the case of any Lender's assignment of any interest in the Commitments or the Loans hereunder, shall survive, in the case of any event or circumstance that occurred prior to the effective date of such assignment, the making of such assignment, notwithstanding that such Lenders may cease to be a "Lender" hereunder. In addition, each representation and warranty made, or deemed to be made by a notice of the Loans, herein or pursuant hereto shall survive the making of such representation and warranty.

Section 13.07. Captions. The table of contents and captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

Section 13.08. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission, electronic transmission (in PDF format) or DocuSign shall be effective as delivery of a manually executed counterpart hereof. The words “execution,” “signed,” “signature,” and words of like import in any Assignment Agreement shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

Section 13.09. GOVERNING LAW. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND THEREUNDER, AND ALL CLAIMS, DISPUTES AND MATTERS ARISING HEREUNDER OR THEREUNDER OR RELATED HERETO OR THERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS EXECUTED IN AND TO BE PERFORMED ENTIRELY WITHIN THAT STATE, WITHOUT REFERENCE TO CONFLICTS OF LAWS PROVISIONS (OTHER THAN SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW).

Section 13.10. JURISDICTION, SERVICE OF PROCESS AND VENUE.

(a) *SUBMISSION TO JURISDICTION.* EACH OBLIGOR AGREES THAT ANY SUIT, ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT TO WHICH IT IS A PARTY OR ANY JUDGMENT ENTERED BY ANY COURT IN RESPECT THEREOF SHALL BE BROUGHT IN THE SUPREME COURT OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY OR IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK AND IRREVOCABLY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF EACH SUCH COURT FOR THE PURPOSE OF ANY SUCH SUIT, ACTION, PROCEEDING OR JUDGMENT.

(b) *Alternative Process.* Nothing herein shall in any way be deemed to limit the ability of the Lenders to serve any such process or summonses in any other manner permitted by applicable Law.

(c) *WAIVER OF VENUE, ETC.* EACH OBLIGOR IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY OBJECTION THAT IT MAY NOW

OR HEREAFTER HAVE TO THE LAYING OF THE VENUE OF ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AND HEREBY FURTHER IRREVOCABLY WAIVES TO THE FULLEST EXTENT PERMITTED BY LAW ANY CLAIM THAT ANY SUCH SUIT, ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. A FINAL JUDGMENT (IN RESPECT OF WHICH TIME FOR ALL APPEALS HAS ELAPSED) IN ANY SUCH SUIT, ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN ANY COURT TO THE JURISDICTION OF WHICH SUCH OBLIGOR IS OR MAY BE SUBJECT, BY SUIT UPON JUDGMENT.

Section 13.11. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

Section 13.12. WAIVER OF IMMUNITY. TO THE EXTENT THAT ANY OBLIGOR MAY BE OR BECOME ENTITLED TO CLAIM FOR ITSELF OR ITS PROPERTY OR REVENUES ANY IMMUNITY ON THE GROUND OF SOVEREIGNTY OR THE LIKE FROM SUIT, COURT JURISDICTION, ATTACHMENT PRIOR TO JUDGMENT, ATTACHMENT IN AID OF EXECUTION OF A JUDGMENT OR EXECUTION OF A JUDGMENT, AND TO THE EXTENT THAT IN ANY SUCH JURISDICTION THERE MAY BE ATTRIBUTED SUCH AN IMMUNITY (WHETHER OR NOT CLAIMED), SUCH OBLIGOR HEREBY IRREVOCABLY AGREES NOT TO CLAIM AND HEREBY IRREVOCABLY WAIVES SUCH IMMUNITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

Section 13.13. Entire Agreement. This Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Each Obligor acknowledges, represents and warrants that in deciding to enter into this Agreement and the other Loan Documents or in taking or not taking any action hereunder or thereunder, it has not relied, and will not rely, on any statement, representation, warranty, covenant, agreement or understanding, whether written or oral, of or with the Lenders other than those expressly set forth in this Agreement and the other Loan Documents.

Section 13.14. Severability. If any provision hereof is found by a court to be invalid or unenforceable, to the fullest extent permitted by applicable Law the parties agree that such invalidity or unenforceability shall not impair the validity or enforceability of any other provision hereof.

Section 13.15. No Fiduciary Relationship. The Administrative Agent, each Lender and their Affiliates (collectively, solely for purposes of this paragraph, the “Lenders”), may have

economic interests that conflict with those of the Obligors, their stockholders and/or their Affiliates (collectively, solely for purposes of this paragraph, the “*Obligors*”). The Obligors acknowledge that the Lenders have no fiduciary relationship with, or fiduciary duty to, any Obligor arising out of or in connection with this Agreement or the other Loan Documents, and the relationship between each Lender and each Obligor are solely that of creditors and debtors. This Agreement and the other Loan Documents do not create a joint venture among the parties.

Section 13.16. USA Patriot Act. The Administrative Agent and the Lenders hereby notify the Obligors that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the “*Act*”) and 31 C.F.R. § 1010.230 (the “*Beneficial Ownership Regulation*”), they are required to obtain, verify and record information that identifies the Obligors, which information includes the name and address of each Obligor and other information that will allow the Administrative Agent and such Lender to identify each Obligor in accordance with the Act and Beneficial Ownership Regulation, including a beneficial ownership certification in form and substance acceptable to the Administrative Agent.

Section 13.17. Treatment of Certain Information; Confidentiality. The Lenders agree to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed to (a) its Affiliates and to its and its Affiliates’ respective partners, directors, officers, employees, agents, trustees, advisors and representatives (collectively, “*Representatives*”) (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such Information confidential), (b) to the extent requested by any regulatory authority purporting to have jurisdiction over it (including any self-regulatory authority, such as FINRA or the National Association of Insurance Commissioners) or any exchange, (c) to the extent required by the applicable Laws or by any subpoena or similar legal process, (d) to any other party hereto, (e) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an agreement containing provisions substantially the same as those in this Section, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective counterparty (or its advisors) to any swap or derivative transaction relating to Borrower or any Guarantor and its obligation, (g) with the consent of Borrower or (h) to the extent such Information (x) becomes publicly available other than as a result of a breach of this Section or (y) becomes available to the Lender, or any of its respective Representatives on a nonconfidential basis from a source other than Borrower or any other Obligor. For purposes of this Section, “*Information*” means all information received from an Obligor relating such Obligor or its Subsidiary or any of their respective businesses, except that the term “*Information*” shall not include, and the Lenders shall not be subject to any confidentiality obligation with respect to any information that (i) is or becomes available to the Lender or any of its Representatives on a nonconfidential basis prior to disclosure by an Obligor or its Subsidiary, (ii) becomes available to a Lender or any of its Representatives after disclosure by Borrower or any other Obligor from a source that, to the knowledge of such Lender, is not subject to a confidentiality obligation to Borrower or such other Obligor (iii) is or becomes publicly available other than as a result of a breach by such Lender, or (iv) is developed by a Lender or any of its Representatives. Any Person required to maintain the confidentiality of Information as provided

in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

In the case of any Lender that has elected to receive material non-public information pursuant to the last paragraph of Section 8.02, such Lender acknowledges that (a) the Information may include material non-public information concerning an Obligor or its Subsidiary, as the case may be, (b) it has developed compliance procedures regarding the use of material non-public information and (c) it will handle such material non-public information in accordance with applicable Law, including United States federal and state securities Laws.

Section 13.18. Releases of Guarantees and Liens. (a) Notwithstanding anything to the contrary contained herein or in any other Loan Document, each Lender agrees, and the Administrative Agent is hereby irrevocably authorized by each Lender and given a limited power of attorney by each Lender to perform the actions described hereafter in this Section 13.18 (without requirement of notice to or consent of any Lender except as expressly required by Section 13.04) to take any action reasonably requested by Borrower having the effect of releasing any Collateral or Obligations (i) to the extent necessary to permit consummation of any transaction not prohibited by any Loan Document or that has been consented to by the Lenders or (ii) under the circumstances described in paragraph (b) below.

(b) At such time as the Loans and the other Obligations (other than the inchoate indemnity obligations) under the Loan Documents shall have been paid in full in cash and the Commitments have been terminated, the Collateral shall be released from the Liens created by the Security Documents, and the Security Documents and all obligations (other than those expressly stated to survive such termination) of the Administrative Agent and each Obligor under the Security Documents shall terminate, all without delivery of any instrument or performance of any act by any Person.

Section 13.19. Acknowledgement and Consent to Bail-In of Affected Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

- (a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an Affected Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable:
 - (i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the Applicable Resolution Authority.

[Remainder of the Page Intentionally Left Blank; Signature Pages Follow]

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

BORROWER:

ISOPLEXIS CORPORATION

By: _____

Name:

Title:

PERCEPTIVE CREDIT HOLDINGS III, LP,
as Administrative Agent and a Lender

By: Perceptive Credit Opportunities GP, LLC,
its general partner

By: _____
Name: Sandeep Dixit
Title: Chief Credit Officer

By: _____
Name: Sam Chawla
Title: Portfolio Manager

Yale Confidential

***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and is the type that the registrant customarily and actually treats as private and confidential.

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AMENDED AND RESTATED LICENSE AGREEMENT

THIS AMENDED AND RESTATED LICENSE AGREEMENT (the “Agreement”) by and between YALE UNIVERSITY, a corporation organized and existing under and by virtue of a charter granted by the general assembly of the Colony and State of Connecticut and located in New Haven, Connecticut (“YALE”), and IsoPlexis Corporation a company organized and existing under the laws of the State of Delaware, and with principal offices located in 51 Cottage St Unit 3, New Haven, Connecticut (“LICENSEE”) is entered into as of the date of final signature below (the “RESTATEMENT DATE”).

1. BACKGROUND

- 1.1. In the course of research conducted under YALE auspices, Dr. Rong Fan, in the Department of BioMedical Engineering at YALE (the “INVENTOR”), has produced an invention entitled [***] (the “INVENTION”).
- 1.2. INVENTOR has assigned to YALE all of INVENTOR’s right, title and interest in and to the INVENTION and any resulting patents.
- 1.3. YALE wishes to have the INVENTION and any resulting patents commercialized to benefit the public good.
- 1.4. LICENSEE has represented to YALE to induce YALE to enter into this Agreement that it shall act diligently to develop and commercialize the LICENSED PRODUCTS for public use throughout the LICENSED TERRITORY (as defined below).
- 1.5. YALE and LICENSEE entered into a License Agreement (the “ORIGINAL AGREEMENT”) effective as of April 25, 2014 pursuant to which YALE granted a license to LICENSEE, subject to the terms and conditions of the Original Agreement, as amended and restated on July 15, 2014.
- 1.6. YALE and LICENSEE now desire to amend, restate and supersede the Original Agreement, as amended and restated on July 15, 2014, in its entirety.
- 1.7. In consideration of these statements and mutual promises, YALE and LICENSEE agree to the terms of this Agreement.

2. DEFINITIONS

The following terms used in this Agreement shall be defined as set forth below:

- 2.1. “AFFILIATE” shall mean any entity or person that directly or indirectly controls, is controlled by or is under common control with LICENSEE. For purposes of this definition, “control” means possession of the power to direct the management of such entity or person, whether through ownership of more than fifty percent (50%) of voting securities, by contract or otherwise.

[***]

2.2. "AGGREGATE NET PROCEEDS" shall mean the amount distributed or available for distribution to the LICENSEE's members or stockholders, as and when such amounts are paid to the LICENSEE or its stockholders, after the payment of all liabilities and expenses of the transaction; without limiting the foregoing, any amounts associated with earn outs, escrows and the like will be included in AGGREGATE NET PROCEEDS as and when such amounts are paid to the LICENSEE or its stockholders.

2.3 "CHANGE OF CONTROL" shall mean:

- (a) any consolidation, merger, combination, reorganization, or other transaction in which LICENSEE is not the surviving entity and in which the holders of the voting securities of LICENSEE do not, after giving effect to such consolidation, merger, combination, reorganization, or other transaction, continue to hold more than fifty percent (50%) of the voting securities of the surviving entity; provided that (i) the conversion of LICENSEE from a limited liability company to a corporation (a "CONVERSION") and (ii) a CONVERSION together with the sale of equity securities for financing purposes (even if more than fifty percent (50%) of the voting securities of LICENSEE are sold in such a transaction), shall not be deemed CHANGES OF CONTROL hereunder; or
- (b) the membership interests or other equity securities of LICENSEE constituting in excess of fifty percent (50%) of the voting power of LICENSEE are exchanged for or changed into stock or other securities of another person, cash, or any other property of another person such that the holders of the voting securities of LICENSEE do not, after giving effect to such transaction, continue to hold more than fifty percent (50%) of the voting securities of LICENSEE or
- (c) a sale or other disposition of all or substantially all of the assets of LICENSEE.

2.4. "CONFIDENTIAL INFORMATION" shall mean all information disclosed by one party to the other during the negotiation of or under this Agreement in any manner, whether orally, visually or in tangible form, that relates to LICENSED PATENTS or the Agreement itself, unless such information is subject to an exception described in Article 8.2; provided, however, that CONFIDENTIAL INFORMATION that is disclosed in tangible form shall be marked "Confidential" at the time of disclosure and CONFIDENTIAL INFORMATION that is disclosed orally or visually shall be identified as confidential at the time of disclosure and subsequently reduced to writing, marked confidential and delivered to the other party within [***] days of such disclosure. CONFIDENTIAL INFORMATION shall include, without limitation, materials, know-how and data, technical or non-technical, trade secrets, inventions, methods and processes, whether or not patentable. Notwithstanding any other provisions of this Article 2.2, CONFIDENTIAL INFORMATION of LICENSEE that is subject to Article 8 of this Agreement is limited to information that LICENSEE supplies pursuant to LICENSEE's obligations under Articles 7 and 9 of this Agreement, unless otherwise mutually agreed to in writing by the parties.

2.5. "EARNED ROYALTY" is defined in Article 6.1.

- 2.6. "EFFECTIVE DATE" is April 25, 2014, which is the effective date of the Original Agreement.
- 2.7. "EXCHANGEABLE PROMISSORY NOTE" shall mean an instrument in substantially the form of Exhibit A that contains an express and absolute promise of LICENSEE to pay to YALE a defined sum of money, plus specified interest, at a specified time and that is exchangeable at the option of YALE into a security in the form of a convertible note or other convertible debt or any class of equity shares available at the time of conversion.
- 2.8. "FIELD" shall mean all fields of use.
- 2.9. "FIRST SALE" shall mean the first sale, lease or other transfer, practice or disposition to a third party of any LICENSED PRODUCT in any country.
- 2.10. "INVENTION" and "INVENTOR" are defined in Article 1.1.
- 2.11. "INVENTOR AGREEMENT" shall mean a consulting or other agreement directly between LICENSEE and an INVENTOR.
- 2.12. "INSOLVENT" shall mean that (i) an involuntary proceeding shall have been commenced or an involuntary petition shall have been filed seeking (a) liquidation, reorganization or other relief in respect of LICENSEE or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy law or (b) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for LICENSEE or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for a period of [***] days or (ii) LICENSEE shall have voluntarily (a) commenced any proceeding or filed any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy law or (b) applied for or consented to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for LICENSEE or for a substantial part of its assets.
- 2.13. "LICENSE" refers to the license granted under Article 3.1.
- 2.14. "LICENSED INFORMATION" shall mean all inventions, biological materials and reagents, devices, patent applications, concepts, processes, information, data, know-how and the like including software, listed in Appendix B, that are owned or co-owned by YALE as of the EFFECTIVE DATE, discovered in or on behalf of the laboratory of the INVENTOR (including, without limitation, by outsourced third parties and consultants), and necessary or useful for the discovery, development, manufacture, use or sale of LICENSED PRODUCTS, or for the practice of the LICENSED METHODS.
- 2.15. "LICENSED METHOD" shall mean any method, procedure, service or process the practice of which, is claimed by a VALID CLAIM of a LICENSED PATENT, or which uses a LICENSED PRODUCT of the type defined in subsection (a) of the definition of LICENSED PRODUCT, or which utilizes, in part or in whole, LICENSED INFORMATION for such method, procedure, process, or service.
- 2.16. "LICENSED PATENTS" shall mean the United States or foreign patent application(s) and patents(s) listed in Appendix A and owned by YALE during the term of this Agreement, together with any continuations, divisionals, and continuations-in-part, to the extent the claims of any such patent or patent

application are directed to subject matter specifically described in the patent applications listed on Appendix A; any reissues, re-examinations, or extensions thereof, or substitutes therefor; and the relevant international equivalents of any of the foregoing. Appendix A is incorporated into this Agreement.

2.17. "LICENSED PRODUCT" shall mean

- (a) any product (including any apparatus or kit) or component part thereof, if the manufacture, use, sale, import, export or practice thereof is claimed by a VALID CLAIM of a LICENSED PATENT, or which utilizes, in part or in whole, LICENSED INFORMATION for its discovery, development, manufacture, use, or sale.
- (b) any LICENSED METHOD.

2.18. "LICENSED TERRITORY" shall mean worldwide.

2.19. "NET SALES" shall mean:

- (a) gross invoice price from the sale, lease or other transfer, practice or disposition of the LICENSED PRODUCTS, or from services performed using or constituting LICENSED PRODUCTS by LICENSEE, SUBLICENSEES or AFFILIATES to third parties, except as set forth in Article 2.19(b), less the following deductions, provided they actually pertain to the disposition of the LICENSED PRODUCTS and are separately invoiced:
 - (i) all discounts, credits and allowances on account of returns;
 - (ii) transportation and insurance;
 - (iii) duties, taxes and other governmental charges levied on the sale, transportation, delivery or practice of LICENSED PRODUCTS, but not including income taxes; and
 - (iv) reimbursement of documented direct costs for performing services or LICENSED METHODS pursuant to a services agreement and prior to the [***] Anniversary of the RESTATEMENT DATE, which shall include reimbursement of out-of-pocket expenses and payments for full-time equivalent ("FTE") efforts of personnel performing services or LICENSED METHODS. Upon mutual written agreement of the parties, the deduction in this Section 2.19 (a) (iv) may be extended beyond the [***] Anniversary of the RESTATEMENT DATE, provided that neither party shall be obligated to agree to such extension.

Except as provided in Section 2.19(a)(iv) above, no deductions shall be made for any other costs or expenses, including but not limited to commissions to independents, agents or those on LICENSEE's or an AFFILIATE's payroll or for the cost of collection.

- (b) "NET SALES" shall not include the gross invoice price for LICENSED PRODUCTS sold to, or services performed using LICENSED PRODUCTS

for, any AFFILIATE unless such AFFILIATE is an end-user of any LICENSED PRODUCT, in which case such consideration shall be included in NET SALES at the average selling price charged to a third party during the same quarter.

- 2.20. "PATENT CHALLENGE" shall mean a challenge or opposition to the validity, patentability, enforceability and/or non-infringement of any of the LICENSED PATENTS or otherwise opposing any of the LICENSED PATENTS.
- 2.21. "PREFERRED STOCK" means the Series A stock issued to investors in connection with a SUCCESSFUL FINANCING.
- 2.22. "REASONABLE COMMERCIAL EFFORTS" shall mean documented efforts that are consistent with those utilized by companies of similar size and type that have successfully developed products and services similar to LICENSED PRODUCTS and LICENSED METHODS. In determining REASONABLE COMMERCIAL EFFORTS with respect to a particular LICENSED PRODUCT or LICENSED METHOD, LICENSEE may not reduce such efforts due to the competitive, regulatory or other impact of any other product or method that it owns, licenses or is developing or commercializing.
- 2.23. "SUBLICENSE INCOME" shall mean consideration in any form received by LICENSEE or an AFFILIATE in connection with a grant to any third party or parties of a sublicense, cross-license, option, or other right, license, privilege or immunity to make, have made, use, sell, have sold, distribute, practice, import or export LICENSED PRODUCTS, but excluding consideration included within EARNED ROYALTIES. SUBLICENSE INCOME shall include without limitation any license signing fee, license maintenance fee, option fee or other payment pursuant to an option, unearned portion of any minimum royalty payment received by LICENSEE, distribution or joint marketing fee, and research and development funding in excess of LICENSEE's cost of performing such research and development. In the event a sublicense includes technology other than the LICENSED PATENTS, or in the event that the LICENSED PATENTS are sublicensed to a third party in a separate agreement from LICENSEE's patents that are licensed to the same third party, the SUBLICENSE INCOME will be reduced by an amount proportional to the relative value of such other technology in accordance with an adjustment formula to be agreed to in writing by the parties. For the avoidance of doubt, any consideration received by LICENSEE or an AFFILIATE for LICENSED METHODS shall constitute NET SALES according to 2.19, but not SUBLICENSE INCOME.
- 2.24. "SUBLICENSEE" shall mean any third party sublicensed by LICENSEE to make, have made, use, sell, have sold, import or export or practice any LICENSED PRODUCT.
- 2.25. "SUCCESSFUL FINANCING" shall mean a bona fide investment in LICENSEE from a single investor or group of investors of [***].
- 2.26. "TERM" is defined in Article 3.4.
- 2.27. "VALID CLAIM" shall mean a pending, issued or unexpired claim of a LICENSED PATENT so long as such claim shall not have been irrevocably abandoned or

declared to be invalid in an unappealable decision of a court or other authority or competent jurisdiction through no fault or cause of LICENSEE

3. LICENSE GRANT AND TERM

- 3.1. Subject to all the terms and conditions of this Agreement, and upon payment to YALE of the consideration described in Article 5, or execution and delivery of an EXCHANGEABLE PROMISSORY NOTE, YALE hereby grants to LICENSEE an exclusive license, with the right to grant sublicenses subject to the terms in section 7, subject to the reservation of rights by YALE under Article 3.3, under the LICENSED PATENTS and LICENSED INFORMATION to make, have made, use, sell, have sold, import, export, or practice LICENSED PRODUCTS within the FIELD in the LICENSED TERRITORY (the "LICENSE").
- 3.2. To the extent that any invention included within the LICENSED PATENTS has been funded in whole or in part by the United States government, the United States government retains certain rights in such invention as set forth in 35 U.S.C. §200-212 and all regulations promulgated thereunder, as amended, and any successor statutes and regulations (the "Federal Patent Policy"). As a condition of the license granted hereby, LICENSEE acknowledges and shall comply with all aspects of the Federal Patent Policy applicable to the LICENSED PATENTS, including the obligation that LICENSED PRODUCTS used or sold in the United States be manufactured substantially in the United States. Nothing contained in this Agreement obligates or shall obligate YALE to take any action that would conflict in any respect with its past, current or future obligations to the United States Government under the Federal Patent Policy with respect to the LICENSED PATENTS.
- 3.3. The LICENSE is expressly made subject to YALE's reservation of the right, on behalf of itself and all other non-profit academic and/or research institutions, to make, use and practice the LICENSED PATENTS and LICENSED PRODUCTS for research, clinical, teaching or other non-commercial purposes, and not for purposes of commercial development, use, manufacture or distribution, and subject to YALE's reservation of the right on behalf of itself and other collaborating non-profit academic institutions to use and modify the software for research and educational purposes.
- 3.4. Unless terminated earlier as provided in Article 13, the term of this Agreement (the "TERM") shall commence on the EFFECTIVE DATE and shall automatically expire on the later of: i) on a country-by-country basis, on the date on which the last of the claims of the patents described in the LICENSED PATENTS in such country expires, lapses or is declared to be invalid by a non-appealable decision of a court or other authority of competent jurisdiction through no fault or cause of LICENSEE; or ii) ten (10) years after the date of FIRST SALE in such country. Upon expiration of the TERM (but not earlier termination as provided in Article 13) of this Agreement in each country, all rights and licenses granted by YALE to LICENSEE hereunder that were in effect immediately prior to the effective date of such expiration, including rights in the LICENSED INFORMATION, shall become non-exclusive, irrevocable, perpetual and fully-paid.
- 3.5. Nothing in this Agreement shall be construed to grant by implication, estoppel or otherwise any licenses under patents of YALE other than the LICENSED PATENTS and LICENSED INFORMATION. Except as expressly provided in this Agreement, under no circumstances will LICENSEE, as a result of this

Agreement, obtain any interest in or any other right to any technology, know-how, patents, patent applications, materials or other intellectual or proprietary property of YALE.

4. DUE DILIGENCE

- 4.1. LICENSEE has designed a plan for developing and commercializing the LICENSED PATENTS that includes a description of research and development, testing, government approval, manufacturing, marketing and sale or lease of LICENSED PRODUCTS (“PLAN”). A copy of the PLAN is attached to this agreement as Appendix C and incorporated herein by reference.
- 4.2. LICENSEE shall use all REASONABLE COMMERCIAL EFFORTS, within [***] days after the EFFECTIVE DATE of this Agreement, to begin to implement the PLAN at its sole expense and thereafter to fully implement the PLAN and to diligently commercialize and develop markets for the LICENSED PRODUCTS.
- 4.3. [***] after the EFFECTIVE DATE of this Agreement, and on or prior to [***] anniversary of the EFFECTIVE DATE, LICENSEE shall provide YALE with an updated and revised copy of the PLAN which shall indicate LICENSEE’s progress and problems to date in development and commercialization of LICENSED PRODUCTS and a forecast and schedule of major events required to market the LICENSED PRODUCTS. Such updated PLAN shall clearly indicate which of LICENSEE’s products or services are LICENSED PRODUCTS, and which LICENSED PATENTS claim each such LICENSED PRODUCT.
 - (a) At least [***] days prior to assignment by LICENSEE pursuant to Article 18.6, the assignee shall provide YALE with an updated and revised copy of the PLAN.
 - (b) YALE shall review and by notice in writing to assignee may approve or disapprove of any updated and revised PLAN provided in accordance with Article 4.3 in its sole discretion, such approval not to be unreasonably withheld.
- 4.4. LICENSEE shall immediately send YALE a notice of abandonment if at any time LICENSEE (a) abandons or suspends its research, development or marketing of the LICENSED PRODUCTS, or its intent to research, develop and market LICENSED PRODUCTS, or (b) fails to comply with its obligations under this Article for a period exceeding [***] days.
- 4.5. LICENSEE shall not, independently or with or through a third party, engage directly or indirectly in the development, manufacture, marketing, sale or distribution of any product or method other than the LICENSED PRODUCTS that are competitive with the LICENSED PRODUCTS.
- 4.6. LICENSEE agrees that YALE shall be entitled to terminate this Agreement pursuant to Article 13.1(b) upon the occurrence of any of the following:
 - (a) LICENSEE shall fail to provide the written reports as provided in Article 4.3 within [***] business days after receipt of written notice from YALE of its failure to do so; or

[***]

- (b) LICENSEE shall fail to receive written approval of the PLAN as defined in Article 4.1 or Article 4.2, or assignee of LICENSEE shall fail to receive written approval of the PLAN as provided in Article 4.3(a); or
- (c) LICENSEE shall fail to implement the PLAN in accordance with this Article or otherwise fails to fulfill any of its obligations under this Article 4; or
- (d) LICENSEE gives notice pursuant to Article 4.4 (which shall be deemed a material breach not capable of being cured); or
- (e) Upon the occurrence of any of the events set forth in Section 4.4 or 4.5; or
- (f) LICENSEE has failed to
 - (i) incur direct expenses for research and development (including clinical development), or marketing of LICENSED PRODUCTS according to the following schedule (“Committed Spend”):

[***]
 - (ii) make a FIRST SALE of a LICENSED PRODUCT within [***] years of the EFFECTIVE DATE; or
 - (iii) receive financing, grant support, or other funds of [***]; or
 - (iv) achieve a SUCCESSFUL FINANCING within [***] years of the EFFECTIVE DATE

In the event that LICENSEE spends less than the required amount in 4.6 (f) (i) in any given year, LICENSEE may make up for such shortfall over [***] period by spending the amount required in each of the following [***] years plus the amount of such shortfall. Such carry-over of any shortfall of Committed Spend shall be permitted only once during the TERM of the LICENSE.

Notwithstanding the foregoing in this Article 4.5, if LICENSEE has not employed REASONABLE COMMERCIAL EFFORTS in developing and selling LICENSED PRODUCTS on a country-by-country basis within the TERRITORY for any reason, then YALE may, at its sole discretion, terminate this LICENSE pursuant to Article 13 herein on a country-by-country basis.

4.7. It is the desire of both YALE and LICENSEE to make LICENSED PRODUCTS available in the developing world, and it is the parties' common desire for the LICENSEE to develop LICENSED PRODUCTS that are clinically and economically suited for use in those areas. To that end, YALE and LICENSEE agree:

- (a) LICENSEE shall make the use of LICENSED PRODUCTS in low-income and lower-middle-income countries (as defined by the World Bank) a part of its Corporate Mission Statement.
- (b) LICENSEE agrees that, upon achieving \$[***] in cumulative NET SALES (determined in accordance with US generally accepted accounting principles) of LICENSED PRODUCTS, LICENSEE will commit an amount equal to [***] of NET SALES, in the form of LICENSED PRODUCTS valued at the gross invoice price or the equivalent dollar amount in the form of training, grants and/or services to governments in low-income and lower-middle income countries, not-for-profit charitable organizations such as Doctors Without Borders, or other such organizations, for the purpose of preventing or treating disease in low income or lower middle income countries.

5. LICENSE ISSUE ROYALTY; LICENSE MAINTENANCE ROYALTY; MILESTONE ROYALTIES

- 5.1. LICENSEE shall pay to YALE on the EFFECTIVE DATE a non-refundable license issue royalty of [***] payable in the form of an EXCHANGEABLE PROMISSORY NOTE issued to YALE, wherein YALE can elect, in its sole discretion, to convert the EXCHANGEABLE PROMISSORY NOTE into LICENSEE'S PREFERRED STOCK based on the PREFERRED STOCK's sale value. In the event YALE receives LICENSEE'S PREFERRED STOCK, YALE agrees to become a signatory to all financing documents on the same basis as the other PREFERRED STOCK holders.
- 5.2. During the TERM of this Agreement, LICENSEE agrees to pay to YALE an annual license maintenance royalty ("LMR") commencing on the second anniversary of the EFFECTIVE DATE and every anniversary thereafter according to the following schedule:

[***]

[***]

- 5.3. The license issue royalty set forth in Article 5.1 shall not be credited against EARNED ROYALTIES payable under Article 6.1. The LMR of Article 5.2 shall be creditable against EARNED ROYALTIES due in the same calendar year payable under Article 6.1.
- 5.4. During the term of this Agreement, LICENSEE agrees to pay YALE the following milestones:
- 1st sublicense agreement with a SUBLICENSEE: [***].
 - 2nd sublicense agreement with a SUBLICENSEE: [***].
- 5.5. In partial consideration for the license, LICENSEE shall grant to YALE rights to participate as an investor in LICENSEE, such that if LICENSEE proposes to sell any equity securities or securities that are convertible into equity securities of LICENSEE (collectively, "Equity Securities") in any preferred stock financing round, then YALE and/or its Assignee (as defined below) will have the right to invest up to the greater of either [***] or [***] on the same terms and conditions as are offered to other investors with respect to such Equity Securities sold in such financing. The term "Assignee" means (a) any entity under the control (directly or indirectly) of [***], or (b) any entity that is controlled by YALE, provided such entity is an "accredited investor" within the meaning of Federal securities laws.
- 5.6. Coincident with CHANGE OF CONTROL, LICENSEE shall pay to YALE a non-refundable change of control fee ("CHANGE OF CONTROL FEE") according to the following schedule:
- (a) For a CHANGE OF CONTROL transaction that results in AGGREGATE NET PROCEEDS of [***], the CHANGE OF CONTROL milestone payment shall be [***].
 - (b) For a CHANGE OF CONTROL transaction that results in Aggregate Net Proceeds of [***], the CHANGE OF CONTROL milestone payment shall be the greater of (i) [***] of the Aggregate Net Proceeds or (ii) [***];
 - (c) For any CHANGE OF CONTROL, any cash received by YALE from any equity interest that YALE may have in LICENSEE or LICENSEE's AFFILIATES at the time of such a CHANGE OF CONTROL will be credited against the CHANGE OF CONTROL FEE due to YALE.

[***]

- 5.7. YALE shall be entitled to one seat on the Board of Directors of LICENSEE with equal voting rights to other board members. YALE agrees that, upon receiving a bona fide investment from a single investor or group of investors of [***], LICENSEE may convert the seat provided to YALE on the Board of Directors under this section 5.7 to an observer seat. If LICENSEE has obligations to provide YALE a seat on the Board of Directors of LICENSEE pursuant to another agreement other than this LICENSE, YALE agrees that it shall limit its representation on the Board of Directors to one designee.

6. EARNED ROYALTIES

- 6.1. During the TERM of this Agreement, as partial consideration for the LICENSE, LICENSEE shall pay to YALE an earned royalty of [***] on worldwide cumulative NET SALES of LICENSED PRODUCTS by LICENSEE or AFFILIATES except in the case of non-consumable electronic hardware, which will be subject to an earned royalty of [***] of NET SALES (“EARNED ROYALTY”). In the event that NET SALES are made by a SUBLICENSEE, then the EARNED ROYALTY paid to YALE shall be reduced by [***].

Such EARNED ROYALTY shall be reduced by [***] if the LICENSED PRODUCT is not covered by a VALID CLAIM, but where the LICENSED PRODUCT has utilized, in part or in whole, any LICENSED INFORMATION for its discovery, development, manufacture, use, or sale. At the end of the TERM, on a country-by-country basis, no further royalties shall accrue and the LICENSE shall become non-exclusive, fully paid-up and royalty-free for such LICENSED PRODUCT in that country.

In the event that LICENSEE determines in good faith that rights to intellectual property owned or controlled by a third party are required to research, develop, make, import, use, sell, offer for sale, manufacture or fully commercialize the LICENSED PRODUCT (in addition to LICENSED PATENTS) , LICENSEE shall be entitled to offset [***] of any amounts paid to such third party against payments due to YALE; provided that in no event shall the amounts payable to YALE from LICENSEE on any LICENSED PRODUCT or LICENSED METHOD be reduced below by more than [***] of the amounts otherwise due to YALE in any calendar year, and provided further that any royalties due to any third party that are not offset in the applicable royalty period shall not be carried forward for offset in a subsequent period.

- 6.2. In the event that (i) LICENSEE or any of its AFFILIATES or SUBLICENSEES brings a PATENT CHALLENGE anywhere in the world, or (ii) LICENSEE or any of its AFFILIATES or SUBLICENSEES assists another party in bringing a PATENT CHALLENGE anywhere in the world (except as required under a court order or subpoena), and (iii) YALE does not choose to exercise its rights to terminate this Agreement pursuant to Article 13, then the following provisions shall apply.

[***]

- (a) All payments due to YALE under this Agreement other than patent costs shall be [***] during the pendency of the PATENT CHALLENGE and shall remain payable to YALE when due.
 - (b) If the PATENT CHALLENGE is inconclusive or results in a determination that at least one challenged claim is both valid and infringed,
 - (1) all payments due to YALE under this Agreement other than patent costs shall be [***] for the remainder of the TERM of the Agreement.
 - (2) LICENSEE shall promptly reimburse YALE for all legal fees and expenses incurred in YALE's defense against the PATENT CHALLENGE.
 - (c) In the event that such a PATENT CHALLENGE is successful, LICENSEE will have no right to recoup any payments made prior to the final, non-appealable determination of a court of competent jurisdiction.
- 6.3. Neither LICENSEE nor any of its AFFILIATES or SUBLICENSEES shall bring a PATENT CHALLENGE without first providing YALE [***] written notice setting forth (a) precisely which claims and patents are being challenged or claimed not to be infringed, (b) a clear statement of the factual and legal basis for the challenge, and (c) an identification of all prior art and other matter believed to invalidate any claim of the LICENSED PATENT or which supports the claim that the LICENSED PATENT is not infringed.
- 6.4. LICENSEE shall pay all EARNED ROYALTIES accruing to YALE within [***] days from the end of each calendar quarter (March 31, June 30, September 30 and December 31), beginning in the first calendar quarter in which NET SALES occur. Unless YALE requests otherwise, LICENSEE shall report all EARNED ROYALTIES and other payments accruing to YALE on a quarterly basis, but shall defer payments accruing to YALE that do not, in total, exceed [***] in any given quarter until the earlier of (1) the end of the calendar year, or (2) the quarter upon which the cumulative accrued royalties and other payments exceed [***].
- 6.5 All EARNED ROYALTIES and other payments due under this Agreement shall be paid to YALE in United States Dollars. In the event that conversion from foreign currency is required in calculating a payment under this Agreement, the exchange rate used shall be the Interbank rate quoted by Citibank at the end of the last business day of the quarter in which the royalty was earned. If overdue, the royalties and any other payments due under this Agreement shall bear interest until payment at a per annum rate [***] above the prime rate in effect at Citibank on the due date and YALE shall be entitled to recover reasonable attorneys' fees and costs related to the administration or enforcement of this Agreement, including collection of royalties or other payments, following such failure to pay. The payment of such interest shall not foreclose YALE from exercising any other right it may have as a consequence of the failure of LICENSEE to make any payment when due.

[***]

7. SUBLICENSES

- 7.1. LICENSEE shall have the right to sublicense to SUBLICENSEES any of the rights granted in section 3.1 above, subject to the provisions of Articles 7.2, 7.3 and 7.4.
- 7.2. Any sublicense granted by LICENSEE shall include substantially the same definitions and provisions, and such other provisions as are needed to enable LICENSEE to provide Yale the protections and benefits contemplated herein. LICENSEE will provide YALE with a copy of each sublicense agreement (and all amendments thereof) promptly after execution. LICENSEE shall also include provisions in all sublicenses to provide that in the event that SUBLICENSEE brings a PATENT CHALLENGE anywhere in the world or assists another party in bringing a PATENT CHALLENGE anywhere in the world (except as required under a court order or subpoena) then LICENSEE shall immediately terminate the sublicense. LICENSEE shall remain responsible for the performance of all SUBLICENSEES under any such sublicense as if such performance were carried out by LICENSEE itself. A breach of this provision shall constitute a material breach that is subject to Article 13.1(b).
- 7.3. LICENSEE shall pay to YALE [***], as adjusted from time to time as provided below, of any SUBLICENSE INCOME.
- 7.4. LICENSEE agrees that it has sole responsibility to promptly:
- (a) provide YALE with a copy of any amendments to sublicenses granted by LICENSEE under this Agreement and to notify YALE of termination of any sublicense; and
 - (b) summarize and deliver copies of all reports provided to LICENSEE by SUBLICENSEES.

8. CONFIDENTIALITY AND PUBLICITY

- 8.1. Subject to the parties' rights and obligations pursuant to this Agreement, YALE and LICENSEE agree that during the term of this Agreement and for [***] years thereafter, each of them:
- (a) will keep confidential and will cause their AFFILIATES and, in the case of LICENSEE, its SUBLICENSEES, to keep confidential, CONFIDENTIAL INFORMATION disclosed to it by the other party, by taking whatever action the party receiving the CONFIDENTIAL INFORMATION would take to preserve the confidentiality of its own CONFIDENTIAL INFORMATION, which in no event shall be less than reasonable care; and
 - (b) will only disclose that part of the other's CONFIDENTIAL INFORMATION to its officers, employees or agents, under requirements of confidentiality, for purposes of carrying out its rights and responsibilities under this Agreement; and
 - (c) will not use the other party's CONFIDENTIAL INFORMATION other than as expressly permitted by this Agreement or disclose the other's

CONFIDENTIAL INFORMATION to any third parties (other than to agents under requirements of confidentiality) under any circumstance without advance written permission from the other party; and

- (d) will, within [***] days of termination of this Agreement, return all the CONFIDENTIAL INFORMATION disclosed to it by the other party pursuant to this Agreement except for one copy which may be retained by the recipient for monitoring compliance with this Article 8 and any surviving clauses.

8.2. The obligations of confidentiality described above shall not pertain to that part of the CONFIDENTIAL INFORMATION that:

- (a) is shown to have been known to or developed by the recipient prior to the disclosure by the disclosing party; or
- (b) is at the time of disclosure or has become thereafter publicly known through no fault or omission attributable to the recipient; or
- (c) is rightfully given to the recipient from sources independent of the disclosing party; or
- (d) is independently developed by the receiving party without use of or reference to the CONFIDENTIAL INFORMATION of the other party; or
- (e) is required to be disclosed by law in the opinion of recipient's attorney, but only after the disclosing party is given prompt written notice and an opportunity to seek a protective order.

8.3. The financial terms of this Agreement constitute CONFIDENTIAL INFORMATION of each party, provided, however, YALE hereby grants its advance written permission to the LICENSEE to share the financial terms of this Agreement with those potential investors that are bound under substantially similar confidentiality terms to this Section 8 with the LICENSEE.

9. REPORTS, RECORDS AND INSPECTIONS

9.1. LICENSEE shall, within [***] days after the calendar year in which NET SALES first occur, and within [***] days after each calendar quarter (March 31, June 30, September 30 and December 31) thereafter, provide YALE with a written report detailing the NET SALES and uses, if any, made by LICENSEE, its SUBLICENSEES and AFFILIATES of LICENSED PRODUCTS during the preceding calendar quarter and calculating the payments due pursuant to Article 6. NET SALES of LICENSED PRODUCTS shall be deemed to have occurred on the date of invoice for such LICENSED PRODUCTS. Each such report shall be signed by an officer of LICENSEE (or the officer's designee), and must include:

- (a) the number or amount, as appropriate, of LICENSED PRODUCTS manufactured, sold, practiced, leased or otherwise transferred or disposed of by LICENSEE, SUBLICENSEES and AFFILIATES;
- (b) a calculation of NET SALES for the applicable reporting period in each country, including the gross invoice prices charged for the LICENSED PRODUCTS and any permitted deductions made pursuant to Article 2.19;

- (c) a calculation of total royalties or other payment due, including any exchange rates used for conversion; and
- (d) names and addresses of all SUBLICENSEES and the type and amount of any SUBLICENSE INCOME received from each SUBLICENSEE; and
- (e) identification of any INVENTOR AGREEMENT(S) in effect during the previous calendar quarter.

9.2. LICENSEE, AFFILIATES and its SUBLICENSEES shall keep and maintain complete and accurate records and books containing an accurate accounting of all data in sufficient detail to enable verification of EARNED ROYALTIES and other payments under this Agreement. LICENSEE shall preserve such books and records for [***] years after the calendar year to which they pertain. Such books and records shall be open to inspection by YALE or an independent certified public accountant selected by YALE, at YALE's expense, during normal business hours upon [***] days' prior written notice, for the purpose of verifying the accuracy of the reports and computations rendered by LICENSEE. In the event LICENSEE underpaid the amounts due to YALE with respect to the audited period by more than [***], LICENSEE shall pay the reasonable cost of such examination, together with the deficiency not previously paid and interest from the due date of such payment, calculated at the rate set forth in Article 6.5, within [***] days of receiving notice thereof from YALE.

9.3. On or before the [***] day following the close of LICENSEE's fiscal year, LICENSEE shall provide YALE with LICENSEE's certified financial statements for the preceding fiscal year including, at a minimum, a balance sheet and an income statement.

10. PATENT PROTECTION

- 10.1. LICENSEE shall be responsible for all past, present and future costs of filing, prosecution and maintenance of all United States patent applications contained in the LICENSED PATENTS. Any and all such United States patent applications, and resulting issued patents, shall remain the property of YALE.
- 10.2. LICENSEE shall be responsible for all past, present and future costs of filing, prosecution and maintenance of all foreign patent applications, and patents contained in the LICENSED PATENTS in the countries outside the United States in the LICENSED TERRITORY selected by YALE and agreed to by LICENSEE. All such applications or patents shall remain the property of YALE. LICENSEE acknowledges that YALE shall not be required to file any such applications in low or lower-middle income countries, as designated by the World Bank (www.worldbank.org). Furthermore, LICENSEE agrees not to file any patent rights that are owned by LICENSEE and that claim LICENSED PRODUCTS in any such low-income or lower-middle income countries.
- 10.3. Prior to SUCCESSFUL FINANCING, and for as long as there is an outstanding balance of unreimbursed patent expenses, LICENSEE shall pay to YALE [***] due monthly, beginning on the EFFECTIVE DATE. Upon SUCCESSFUL FINANCING, all patent expenses, including all outstanding balances of unreimbursed patent expenses, will be paid [***] days of invoice from YALE.

[***]

- 10.4. If, upon the request of YALE, LICENSEE does not agree in writing to pay the expenses of filing, prosecuting or maintaining a patent application or patent in any country outside the United States, or fails to pay the expenses of filing, prosecuting or maintaining a patent application or patent in the United States, then LICENSEE's rights under this Agreement shall terminate automatically with respect to that country.
- 10.5. The costs mentioned in Articles 10.2, 10.3 and 10.4 shall include, but are not limited to, any past, present and future taxes, annuities, working fees, maintenance fees, renewal and extension charges. Payment of such costs shall be made, at YALE's option, either directly to patent counsel or by reimbursement to YALE. In either case, LICENSEE shall make payment directly to the appropriate party within [***] days of receiving its invoice. If LICENSEE fails to make payment to YALE or patent counsel, as appropriate, within the [***] day period, LICENSEE shall be charged a [***] surcharge on the invoiced amount plus interest at the rate of [***] per month or fraction thereof or such higher amount as may be charged by patent counsel. Failure of LICENSEE to pay the costs shall be grounds for termination by YALE under Article 13.1(b).
- 10.6. All patent applications under the LICENSED PATENTS shall be prepared, prosecuted, filed and maintained by independent patent counsel chosen by YALE and reasonably acceptable to LICENSEE. Said independent patent counsel shall be ultimately responsible to YALE. YALE shall instruct patent counsel to keep both YALE and LICENSEE fully informed of the progress of all patent applications and patents, and to give both YALE and LICENSEE reasonable opportunity to comment on the type and scope of useful claims and the nature of supporting disclosures. YALE will not finally abandon any patent application for which LICENSEE is bearing expenses without LICENSEE's consent. YALE shall have no liability to LICENSEE for damages, whether direct, indirect or incidental, consequential or otherwise, allegedly arising from its good faith decisions, actions and omissions in connection with such prosecution.
- 10.7. LICENSEE shall mark, and shall require AFFILIATES and SUBLICENSEES to mark, all LICENSED PRODUCTS, that are tangible products, with the numbers of all patents included in LICENSED PATENTS that cover the LICENSED PRODUCTS. Without limiting the foregoing, all LICENSED PRODUCTS shall be marked in such a manner as to conform with the patent marking notices required by the law of any country where such LICENSED PRODUCTS are made, sold, used or shipped, including, but not limited to, the applicable patent laws of that country.

11. INFRINGEMENT AND LITIGATION

- 11.1. Each party shall promptly notify the other in writing in the event that it obtains knowledge of infringing activity by third parties, or is sued or threatened with an infringement suit, in any country in the LICENSED TERRITORY as a result of activities that concern the LICENSED PATENTS, and shall supply the other party with documentation of the infringing activities that it possesses.
- 11.2. During the TERM of this Agreement:
- (a) LICENSEE shall have the first right and obligation to defend the LICENSED PATENTS against infringement or interference in the FIELD and in the LICENSED TERRITORY by third parties. This right and

[***]

obligation includes bringing any legal action for infringement and defending any counter claim of invalidity or action of a third party for declaratory judgment for non-infringement or non-interference. If, in the reasonable opinion of both LICENSEE's and YALE's respective counsel, YALE is required to be a named party to any such suit for standing purposes, LICENSEE may join YALE as a party; provided, however, that (i) YALE shall not be the first named party in any such action, (ii) the pleadings and any public statements about the action shall state that the action is being pursued by LICENSEE and that LICENSEE has joined YALE as a party; and (iii) LICENSEE shall keep YALE reasonably apprised of all developments in any such action. LICENSEE may settle such suits solely in its own name and solely at its own expense and through counsel of its own selection; provided, however, that no settlement shall be entered without YALE's prior written consent, such consent not to be unreasonably withheld. Without limiting the foregoing, YALE may withhold its consent to any settlement that would in any manner constitute or incorporate an admission by YALE or require YALE to take or refrain from taking any action. LICENSEE shall bear the expense of such legal actions. Except for providing reasonable assistance, at the request and expense of LICENSEE, YALE shall have no obligation regarding the legal actions described in Article 11.2 unless required to participate by law. However, YALE shall have the right to participate in any such action through its own counsel and at its own expense. Any recovery shall first be applied to LICENSEE's out of pocket expenses and second shall be applied to YALE's out of pocket expenses, including legal fees. YALE shall recover [***] of any excess recovery over those expenses.

- (b) In the event LICENSEE fails to initiate and pursue or participate in the actions described in Article (a) within [***] days of (a) notification of infringement from YALE or (b) the date LICENSEE otherwise first becomes aware of an infringement, whichever is earlier, YALE may, in its sole discretion, convert the LICENSE granted in Article 3 to a nonexclusive license, and issue licenses to third parties under the LICENSED PATENTS to make, have made, use, sell, have sold, import, export, or practice LICENSED PRODUCTS within the FIELD in the LICENSED TERRITORY. Additionally, YALE shall have the right to initiate legal action such as that described in Article 11.2(a) at its own expense and YALE may use the name of LICENSEE as party plaintiff to uphold the LICENSED PATENTS. In such case, LICENSEE shall provide reasonable assistance to YALE if requested to do so. YALE may settle such actions solely through its own counsel. Any recovery shall be retained by YALE. YALE may terminate the LICENSE in the country where such legal action is taken.
- (c) In the event LICENSEE is permanently enjoined from exercising its LICENSE under this Agreement pursuant to an infringement action brought by a third party, or if both LICENSEE and YALE elect not to undertake the defense or settlement of a suit alleging infringement for a period of [***] months from notice of such suit, then either party shall have the right to terminate this Agreement in the country where the suit was filed with respect to the licensed patent following [***] days' written notice to the other party in accordance with the terms of Article 15.

- (d) Notwithstanding the foregoing, neither LICENSEE nor YALE shall take any action to enforce the LICENSED PATENTS, or patent rights owned by LICENSEE and which claim the LICENSED PRODUCTS, in low or lower-middle income countries, where such action is intended to prevent the sale of LICENSED PRODUCTS in any such countries. However, LICENSEE and/or YALE may take such action in any such country, provided that such action is intended to prevent the manufacturing of LICENSED PRODUCTS for export to countries that are not low-income or lower-middle countries.

12. USE OF YALE'S NAME

- 12.1. LICENSEE shall not use the name "Yale" or "Yale University," nor any variation or adaptation thereof, nor any trademark, tradename or other designation owned by YALE, nor the names of any of its trustees, officers, faculty, students, employees or agents, for any purpose without the prior written consent of YALE in each instance, such consent to be granted or withheld by YALE in its sole discretion, except that LICENSEE may state that it has licensed from YALE one or more of the patents and/or applications comprising the LICENSED PATENTS and LICENSEE may state the relationship of the INVENTORS to YALE and how the INVENTOR's research at YALE relates to such patents and/or inventions.

13. TERMINATION

- 13.1. YALE shall have the right to terminate this Agreement upon written notice to LICENSEE in the event LICENSEE:
 - (a) fails to make any payment whatsoever due and payable pursuant to this Agreement unless LICENSEE shall make all such payments (and all interest due on such payments under Article 6.4) within the [***] day period after receipt of written notice from YALE; or
 - (b) commits a material breach of any other provision of this Agreement which is not cured (if capable of being cured) within the [***] day period after receipt of written notice thereof from YALE, or upon receipt of such notice if such breach is not capable of being cured; or
 - (c) fails to obtain or maintain adequate insurance as described in Article 14.2, whereupon YALE may terminate this Agreement immediately upon written notice to LICENSEE.
 - (d) If LICENSEE or any of its AFFILIATES brings a PATENT CHALLENGE against YALE, or assists others in bringing a PATENT CHALLENGE against YALE (except as required under a court order or subpoena), whereupon YALE may terminate this Agreement immediately.
 - (e) If a SUBLICENSEE brings a PATENT CHALLENGE or assists another party in bringing a PATENT CHALLENGE (except as required under a court order or subpoena), then YALE may send a written demand to LICENSEE to terminate such sublicense. If LICENSEE fails to so terminate such sublicense within [***] days after YALE's demand, YALE may immediately terminate this Agreement.

[***]

- 13.2. This Agreement shall terminate automatically without any notice to LICENSEE in the event LICENSEE shall cease to carry on its business for a continuous period of [***] days or becomes INSOLVENT, or a petition in bankruptcy is filed against LICENSEE and is consented to, acquiesced in or remains undismissed for [***] days, or LICENSEE makes a general assignment for the benefit of creditors, or a receiver is appointed for LICENSEE.
- 13.3. LICENSEE shall have the right to terminate this Agreement upon written notice to YALE:
- (a) at any time on [***] months' notice to YALE, provided LICENSEE is not in breach and upon payment of all amounts due YALE throughout the effective date of termination; or
 - (b) in the event YALE commits a material breach of any of the provisions of this Agreement and such breach is not cured (if capable of being cured) within the [***] day period after receipt of written notice thereof from LICENSEE, or upon receipt of such notice if such breach is not capable of being cured.
- 13.4. Upon termination of this Agreement pursuant to Sections 13.1 through 13.3 but not natural expiration pursuant to Section 3.4), all rights and licenses granted to LICENSEE under the terms of this Agreement are terminated and YALE has the option, in its discretion, to terminate any sublicense granted by LICENSEE. Upon such termination, LICENSEE shall cease to make, have made, use, sell, have sold, distribute, practice, import or export LICENSED PRODUCTS. Within [***] days of the effective date of termination LICENSEE shall return to YALE:
- (a) All CONFIDENTIAL INFORMATION disclosed by YALE;
 - (b) the last report required under Article 4 or Article 9; and
 - (c) all payments incurred up to the effective date of termination.
- 13.5. Termination of this Agreement shall not affect any rights or obligations accrued prior to the effective date of such termination and specifically LICENSEE's obligation to pay all royalties and other payments specified by Article 4 and Article 6. In particular, but without limitation, the following provisions shall survive any termination: Articles 2 and 8, the preservation and inspection obligations of Article 9, Article 12, this Article 13.5, Article 13.6, Article 13.8, Article 14, Article 15, Article 17.1, and Article 18. The parties agree that claims giving rise to indemnification may arise after the TERM or termination of the LICENSE granted herein.
- 13.6. The rights provided in this Article 13 shall be in addition and without prejudice to any other rights, whether at law or in equity, which the parties may have with respect to any default or breach of the provisions of this Agreement.
- 13.7. Waiver by either party of one or more defaults or breaches shall not deprive such party of the right to terminate because of any subsequent default or breach.
- 13.8. Upon termination of this Agreement for any reason other than breach by YALE or expiration pursuant to Section 3.4, and subject to all third party rights, LICENSEE

shall permit YALE and its future licensees to utilize, reference and otherwise have the benefit of all regulatory approvals of, or clinical trials or other studies conducted on, and all filings made with regulatory agencies with respect to, the LICENSED PRODUCTS. In addition, at YALE's request, LICENSEE shall deliver to YALE within [***] months of such request all records required by regulatory authorities to be maintained with respect to the sale, storage, handling, shipping and use of the LICENSED PRODUCTS, all reimbursement approval files, all documents, data and information related to clinical trials and other studies of LICENSED PRODUCTS, any other data, techniques, know-how and other information developed or generated that relate to the LICENSED PATENTS or LICENSED PRODUCTS, and all copies and facsimiles of such materials, documents, information and files. YALE agrees that, subject to the provisions of Article 8, LICENSEE may retain one copy thereof to the extent LICENSEE is required by law to maintain such copy. In the event that YALE executes a license agreement with a future licensee for the information granted to YALE pursuant to this Article 13.8, YALE shall pay to LICENSEE, up to an amount equal to [***] of LICENSEE's documented development costs incurred under this Agreement, a revenue share of [***] on all consideration received from such licensee allocable to LICENSED PRODUCTS or sales thereof, including (a) all upfront and other payments payable to YALE upon execution of such license agreement with such licensee; (b) any development, regulatory or commercialization milestone payments for milestones occurring under any such license agreement; (c) license maintenance fees under any such license agreement; (d) any payments to YALE for the supply of LICENSED PRODUCTS; (e) royalties, profit share payments and other payments based on the sales of LICENSED PRODUCTS; and (f) the fair market value of any other form of consideration paid to YALE by such licensee pursuant to this Article 13.8, *but excluding* YALE's cost of goods to procure or manufacture LICENSED PRODUCTS for which payments under clause (d) above are made to YALE.

14. INDEMNIFICATION; INSURANCE; NO WARRANTIES

- 14.1. LICENSEE shall indemnify, defend by counsel acceptable to YALE, and hold harmless YALE and its trustees, officers, employees, and agents (collectively, "YALE Indemnitees"), from and against any claim, liability, cost, expense, damage, deficiency, loss, or obligation, of any kind or nature (including, without limitation, reasonable attorneys' fees and other costs and expenses of defense) (collectively, "CLAIMS"), based upon, arising out of or otherwise relating to this LICENSE, including without limitation any cause of action relating to product liability, or any theory of liability (including without limitation tort, warranty, or strict liability) or the death, personal injury, or illness of any person or out of damage to any property related in any way to the rights granted under this Agreement; or resulting from the production, manufacture, sale, use, lease, or other disposition or consumption or advertisement of the LICENSED PRODUCTS by LICENSEE, its AFFILIATES, SUBLICENSEES or any other transferees; or in connection with any statement, representation or warranty of LICENSEE, its AFFILIATES, SUBLICENSEES or any other transferees with respect to the LICENSED PRODUCTS. LICENSEE shall not settle or compromise the CLAIM without the prior written consent of YALE, such consent not to be unreasonably withheld. Without limiting the foregoing, YALE may withhold its consent to any settlement or compromise that would in any manner constitute or incorporate an admission by YALE or require YALE to take or refrain from taking any action.

[***]

- 14.2. LICENSEE shall purchase and maintain in effect and shall require its SUBLICENSEES to purchase and maintain in effect a policy of commercial, general liability insurance to protect YALE with respect to events described in Article 14.1. Such insurance shall:
- (a) list “YALE, its trustees, directors, officers, employees and agents” as additional insureds under the policy;
 - (b) provide that such policy is primary and not excess or contributory with regard to other insurance YALE may have;
 - (c) be endorsed to include product liability coverage in amounts no less than [***] Dollars per incident and [***] Dollars annual aggregate; and
 - (d) be endorsed to include contractual liability coverage for LICENSEE’s indemnification under Article 14.1; and
 - (e) by virtue of the minimum amount of insurance coverage required under Article 14.2(c), not be construed to create a limit of LICENSEE’s liability with respect to its indemnification under Article 14.1.
- 14.3. By signing this Agreement, LICENSEE certifies that the requirements of Article 14.2 will be met on or before the earlier of (a) the date of FIRST SALE of any LICENSED PRODUCT or (b) the date any LICENSED PRODUCT is tested or used on humans, and will continue to be met thereafter, and, before the earlier of either (a) or (b), LICENSEE shall furnish a Certificate of Insurance and a copy of the current insurance policy to YALE. LICENSEE shall secure agreement from its insurer to give [***] days’ written notice to YALE prior to any cancellation of or material change to the policy.
- (a) YALE MAKES NO, AND EXPRESSLY DISCLAIMS ALL, REPRESENTATIONS OR WARRANTIES THAT ANY CLAIMS OF THE LICENSED PATENTS, ISSUED OR PENDING, ARE VALID, OR THAT THE MANUFACTURE, USE, PRACTICE, SALE OR OTHER DISPOSAL OF THE LICENSED PRODUCTS DOES NOT OR WILL NOT INFRINGE UPON ANY PATENT OR OTHER RIGHTS NOT VESTED IN YALE.
 - (b) YALE MAKES NO, AND EXPRESSLY DISCLAIMS ALL, REPRESENTATIONS AND WARRANTIES WHATSOEVER WITH RESPECT TO THE LICENSED PATENTS AND LICENSED PRODUCTS, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
 - (c) LICENSEE SHALL MAKE NO STATEMENTS, REPRESENTATION OR WARRANTIES WHATSOEVER TO ANY THIRD PARTIES THAT ARE INCONSISTENT WITH THE DISCLAIMERS BY YALE IN ARTICLE 14.3(a) AND (b).
 - (d) IN NO EVENT SHALL YALE, OR ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES AND AFFILIATES BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGE OR INJURY TO PROPERTY

[***]

AND LOST PROFITS, REGARDLESS OF WHETHER YALE SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

- (e) IN NO EVENT SHALL YALE, OR ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES AND AFFILIATES, BE LIABLE FOR DAMAGES IN EXCESS OF AMOUNTS YALE HAS RECEIVED FROM LICENSEE UNDER THIS LICENSE.

15. NOTICES

- 15.1. Any monetary payment, notice or other communication required by this Agreement (a) shall be in writing, (b) may be delivered personally or sent by reputable overnight courier with written verification of receipt or by registered or certified first class United States Mail, postage prepaid, return receipt requested, (c) shall be sent to the following addresses or to such other address as such party shall designate by written notice to the other party, and (d) shall be effective upon receipt:

FOR YALE:
Managing Director
YALE UNIVERSITY
Office of Cooperative Research
433 Temple Street
New Haven, CT 06511

FOR LICENSEE:
Chief Executive Officer
IsoPlexis Corporation
51 Cottage, Unit 3
New Haven, CT 06511

16. INVENTOR AGREEMENTS

- 16.1 If LICENSEE and INVENTOR enter into an INVENTOR AGREEMENT, LICENSEE shall so notify YALE in writing within [***] days. The LICENSEE acknowledges that: (i) the INVENTOR is a faculty member, other employee, or student of YALE; (ii) the INVENTOR is subject to certain policies of YALE, as such policies may be revised from time to time, including policies concerning consulting, conflicts of interest, and intellectual property (“YALE POLICIES”); (iii) to the extent any provision of the INVENTOR AGREEMENT conflicts with YALE POLICIES, or imposes obligations or responsibilities compliance with which would require the INVENTOR to act in violation of YALE POLICIES, such provision shall be void. INVENTOR is a third party beneficiary of this paragraph.

17. LAWS, FORUM AND REGULATIONS

- 17.1. Any matter arising out of or related to this Agreement shall be governed by and in accordance with the substantive laws of the State of Connecticut, without regard to its conflicts of law principles, except where the federal laws of the United States are applicable and have precedence. Any dispute arising out of or related to this Agreement shall be brought exclusively in a court of competent jurisdiction in the State of Connecticut, and the parties hereby irrevocably submit to the jurisdiction of such courts.
- 17.2. LICENSEE shall comply, and shall cause its AFFILIATES and SUBLICENSEES to comply, with all foreign and United States federal, state, and local laws, regulations, rules and orders applicable to the testing, production, transportation,

packaging, labeling, export, practice, sale and use of the LICENSED PRODUCTS. In particular, LICENSEE shall be responsible for assuring compliance with all United States export laws and regulations applicable to this LICENSE and LICENSEE's activities under this Agreement.

18. MISCELLANEOUS

- 18.1. This Agreement shall be binding upon and inure to the benefit of the parties and their respective legal representatives, successors and permitted assigns.
- 18.2. This Agreement constitutes the entire agreement of the parties relating to the LICENSED PATENTS and LICENSED PRODUCTS, and all prior representations, agreements and understandings, written or oral, including the Original Agreement, as amended and restated on July 15, 2014, are merged into it and are superseded by this Agreement.
- 18.3. The provisions of this Agreement shall be deemed separable. If any part of this Agreement is rendered void, invalid, or unenforceable, such determination shall not affect the validity or enforceability of the remainder of this Agreement unless the part or parts which are void, invalid or unenforceable shall substantially impair the value of the entire Agreement as to either party.
- 18.4. Paragraph headings are inserted for convenience of reference only and do not form a part of this Agreement.
- 18.5. No person not a party to this Agreement, including any employee of any party to this Agreement, shall have or acquire any rights by reason of this Agreement. Nothing contained in this Agreement shall be deemed to constitute the parties partners or joint venturers with each other or any third party, and neither party shall be deemed the agent of the other.
- 18.6. This Agreement may not be amended or modified except by written agreement executed by each of the parties. This Agreement is personal to LICENSEE and shall not be assigned by LICENSEE without the prior written consent of YALE, not to be unreasonably withheld. . Any attempted assignment in contravention of this Article 18.6 shall be null and void and shall constitute a material breach of this Agreement.
- 18.7. LICENSEE, or any SUBLICENSEE or assignee, will not create, assume or permit to exist any lien, pledge, security interest or other encumbrance on this Agreement or any sublicense.
- 18.8. The failure of any party hereto to enforce at any time, or for any period of time, any provision of this Agreement shall not be construed as a waiver of either such provision or of the right of such party thereafter to enforce each and every provision of this Agreement.
- 18.9. This Agreement may be executed in any number of counterparts and any party may execute any such counterpart, each of which when executed and delivered shall be deemed to be an original and all of which counterparts taken together shall constitute but one and the same instrument.

Signature Page Follows

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IN WITNESS to their Agreement, the parties have caused this Agreement to be executed in duplicate originals by their duly authorized representatives.

YALE UNIVERSITY

ISOPLEXIS CORPORATION

By: /s/ Jonathan Soderstrom

By: /s/ Sean Mackay

E. Jonathan Soderstrom, Ph.D.

Sean Mackay

Managing Director

Chief Executive Officer

Office of Cooperative Research

Date: 24 November 2015

Date: 28 November 2015

Appendix A
LICENSED PATENTS¹

[***]

¹ As of the RESTATEMENT DATE.

[***]

Appendix B
LICENSED INFORMATION

[***]

[***]

Appendix C

PLAN

[***]

[***]

[***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and is the type that the registrant customarily and actually treats as private and confidential.

AMENDMENT TO THE LICENSE AGREEMENT [***]
Between IsoPlexis Corporation ("ISOPLEXIS") and Yale University ("YALE")

PREAMBLE

- 1) The Parties entered into a license agreement effective April 25, 2014, which was amended and restated July 15, 2014, which was then amended and restated November 28, 2015 (together, the "Agreement").
- 2) The parties are willing to amend the Agreement in accordance with this Amendment (the "Amendment").
- 3) All other terms of the Agreement shall remain unchanged.

NOW THEREFORE IT IS AGREED AS FOLLOWS:

1. AMENDMENTS TO THE AGREEMENT

- i) Appendix A of the Agreement shall be modified to include the following as Licensed Patents, in addition to the previously listed Licensed Patents:

[***]

- ii) As partial consideration for the inclusion of the above patent applications in this Amendment, ISOPLEXIS shall pay to YALE [***], which is intended to reflect unreimbursed patent expenses incurred prior to the date of execution of this Amendment.

2. CONTINUATION OF THE AGREEMENT:

The Agreement remains in full force as supplemented and amended by this Amendment. Except as expressly specified in this Amendment, the Agreement is not amended and the terms and conditions contained therein remain unchanged.

This Amendment enters into force upon its execution by the Parties.

YALE UNIVERSITY

ISOPLEXIS

By: /s/ Jonathan Soderstrom

By: /s/ Sean Mackay

E. Jonathan Soderstrom, Ph.D.
Managing Director
Office of Cooperative Research

Name: Sean MacKay
Title: Chief Executive Officer

Date: 19 Dec 2016

Date: 12/16/16

[***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and is the type that the registrant customarily and actually treats as private and confidential.

SECOND AMENDMENT TO THE LICENSE AGREEMENT [***]
Between IsoPlexis Corporation ("ISOPLEXIS") and Yale University ("YALE")

PREAMBLE

- 1) The Parties entered into a license agreement effective April 25, 2014, which was amended and restated July 15, 2014, and subsequently amended and restated November 28, 2015 and amended December 19, 2016 (together, the "Agreement").
- 2) The parties are willing to amend the Agreement in accordance with a second amendment (the "SECOND AMENDMENT") effective upon the date of final signature below (the "EFFECTIVE DATE").
- 3) All other terms of the Agreement shall remain unchanged.

NOW THEREFORE IT IS AGREED AS FOLLOWS:

1. AMENDMENTS TO THE AGREEMENT

- i) Appendix A of the Agreement shall be modified to include the following as Licensed Patents, in addition to the previously listed Licensed Patents:

[***]

- ii) As consideration for the inclusion of the above patent application in this SECOND AMENDMENT, ISOPLEXIS shall issue to YALE 3,374 shares of Series B-2 Preferred Stock (the "B-2 PREFERRED STOCK"), of LICENSEE pursuant to a subscription agreement between LICENSEE and YALE, which is equivalent to \$100,000 in the form of participating preferred stock. As a condition to the issuance of the B-2 PREFERRED STOCK, YALE shall confirm that it is a party to each of (a) the Second Amended and Restated Investors' Rights Agreement, dated June 17, 2016, among LICENSEE, its investors and certain other stockholders of LICENSEE, (b) the Second Amended and Restated Right of First Refusal and Co-Sale Agreement, dated June 17, 2016, among LICENSEE, its investors and certain other stockholders of LICENSEE and (c) the Second Amended and Restated Voting Agreement, dated June 17, 2016, among LICENSEE, its investors and certain other stockholders of LICENSEE by executing and delivering to LICENSEE a joinder agreement to each such agreement. Stock certificates representing the B-2 PREFERRED STOCK shall be delivered to YALE within [***] days of issuance.
- iii) ISOPLEXIS shall pay to YALE unreimbursed patent expenses incurred prior to the date of execution of this Amendment, estimated to be \$[***].

2. DUE DILIGENCE

- (i) The following new paragraph shall be added to Section 4. of the Agreement:

4.8 LICENSEE agrees that YALE shall be entitled to terminate this Agreement pursuant to Article 13.1(b) but only with respect to the LICENSED PATENTS included in paragraph 1(i) of the SECOND AMENDMENT upon the occurrence of the following:

LICENSEE has failed to incur direct expenses for research and development of the LICENSED PRODUCTS covered by a VALID CLAIM of a LICENSED PATENT listed in paragraph 1(i) of this SECOND AMENDMENT (including clinical development or marketing of such LICENSED PRODUCTS) according to the following schedule (the "NEW TECHNOLOGY COMMITTED SPEND"):

[***]

[***]

In the event that LICENSEE spends less than the required amount in this Article 4.8 in any given year, LICENSEE may make up for such shortfall over a [***] year period by spending the amount required in each of the following [***] years plus the amount of such shortfall. Such carry-over of any shortfall of NEW TECHNOLOGY COMMITTED SPEND shall be permitted only once during the TERM of the LICENSE and if LICENSEE fails to make up such shortfall, then YALE may, at its sole discretion, terminate the LICENSE with respect to the LICENSED PATENTS included in paragraph 1(i) of this SECOND AMENDMENT only.

3. CONTINUATION OF THE AGREEMENT:

The Agreement remains in full force as supplemented and amended by this SECOND AMENDMENT.

Except as expressly specified in this SECOND AMENDMENT, the Agreement is not amended and the terms and conditions contained therein remain unchanged.

This SECOND AMENDMENT enters into force upon its execution by the Parties.

YALE UNIVERSITY

ISOPLEXIS CORPORATION

By: /s/ Jonathan Soderstrom

By: /s/ Sean Mackay

E. Jonathan Soderstrom, Ph.D.
Managing Director
Office of Cooperative Research

Name: Sean Mackay
Title: Chief Executive Officer

Date: 8 January 2018

Date: January 5th, 2018

[***]

[***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and is the type that the registrant customarily and actually treats as private and confidential.

LICENSE AGREEMENT

THIS AGREEMENT is effective as of the 8 day of March, 2017 (the “Effective Date”), between the CALIFORNIA INSTITUTE OF TECHNOLOGY (“Caltech”), a not-for-profit corporation duly organized and existing under the laws of the State of California with an address at 1200 East California Boulevard, MC 6-32, Pasadena, California 91125 and ISOPLEXIS CORPORATION (“Licensee”), a corporation having a place of business at 35 NE Industrial Road, Branford, CT 06405 (the “Parties”).

WHEREAS, Licensee is desirous of obtaining, and Caltech wishes to grant to Licensee, an exclusive license to certain Exclusively Licensed Patent Rights and to the Improvement Patent Rights, and a nonexclusive license under the Technology, as further defined below;

NOW, THEREFORE, the Parties agree as follows:

ARTICLE 1 DEFINITIONS

1.1 “**Affiliate**” means any corporation, limited liability company or other legal entity which directly or indirectly controls, is controlled by, or is under common control with Licensee as of the Effective Date of this Agreement. For the purpose of this Agreement, “**control**” shall mean the direct or indirect ownership of greater than fifty percent (>50%) of the outstanding shares on a fully diluted basis or other voting rights of the subject entity to elect directors, or if not meeting the preceding, any entity owned or controlled by or owning or controlling at the maximum control or ownership right permitted in the country where such entity exists. In addition, a party’s status as an Affiliate of Licensee shall terminate if and when such control ceases to exist.

1.2 “**Caltech IP**” means the Exclusively Licensed Patent Rights, Improvement Patent Rights, and the Technology.

1.3 **“Deductible Expenses”** means the following expenses incurred in connection with sales or licensing of Licensed Products to the extent actually paid by Licensee, Affiliates, or Sublicensees in accordance with generally recognized principles of accounting: (a) sales, use or turnover taxes; (b) excise, value added, or other taxes or custom duties; (c) transportation, freight, and handling charges, and insurance on shipments to customers; (d) trade, cash or quantity discounts or rebates to the extent actually granted; (e) agent fees or commissions; and (f) rebates, refunds, and credits for any rejected or returned Licensed Products or because of retroactive price reductions or rebates.

1.4 **“Effective Date”** has the meaning set forth in the preamble.

1.5 **“Exclusively Licensed Patent Rights”** means Caltech’s rights under: (a) all patents and patent applications listed in Exhibit A attached hereto; (b) any patents issuing therefrom; and (c) any patents or patent applications claiming a right of priority thereto (including reissues, reexaminations, renewals, extensions, divisionals, continuations, continued prosecution applications, continuations-in-part (only to the extent that the claims in such continuations-in-part are fully supported under 35 U.S.C. §112 by another patent or patent application in the Exclusively Licensed Patent Rights, or are Improvement Patent Rights)) and foreign counterparts of any of the foregoing, and patents issuing therefrom.

1.6 **“Field”** means detection of metabolites, including metabolites, proteins and other analytes.

1.7 **“Improvements”** means any future inventions conceived and reduced to practice or otherwise developed [***], which are dominated by a Valid Claim under the Exclusively Licensed Patent Rights, and which Caltech has the right to license in accordance with this Agreement.

1.8 **“Improvement Patent Rights”** means Caltech’s rights under: (a) all patents and patent applications with claims directed to Improvements which have been elected on in writing by Licensee after disclosure by Caltech of such Improvements; (b) any patents issuing therefrom; and (c) any patents or patent applications claiming a right of priority thereto (including reissues, reexaminations, renewals, extensions, divisionals, continuations, continued prosecution applications, continuations-in-part (only to the extent that the claims in such continuations-in-

part are fully supported under 35 U.S.C. §112 by another patent or patent application in the Exclusively Licensed Patent Rights, or are themselves Improvement Patent Rights)) and foreign counterparts of any of the foregoing), and patents issuing therefrom.

1.9 **“Licensed Product”** means any product, device, system, article of manufacture, machine, composition of matter, or process or service in the Field that is covered by, or is made by a process covered by, any Valid Claim, or that utilizes Technology in material part.

1.10 **“Net Revenues”** means all amounts, less Deductible Expenses, received by Licensee, Affiliates, and Sublicensees from the sale or other distribution (whether commercial or not) of Licensed Products. Any non-cash consideration received by Licensee for the sale or other distribution of Licensed Products or the licensing of Exclusively Licensed Patent Rights or Improvement Patent Rights will be converted to a cash value based on the fair market value or a value mutually agreed upon.

1.11 **“Sublicensee”** means any person or entity sublicensed, or granted an option for a sublicense, by Licensee under this Agreement.

1.12 **“Sublicensing Revenue”** means cash consideration and cash value of all equity consideration valued at fair market value that Licensee and/or Affiliates receive from a Sublicensee in consideration for, and to the extent attributable to, the grant of a sublicense under the Caltech IP that is not royalties on Net Revenues. Sublicensing Revenue includes, but is not limited to, license fees, license maintenance fees, milestone payments, and other payments that Licensee receives (including payments for technical assistance and the like). Such Sublicensing Revenue specifically shall not include payments made by a Sublicensee solely: (a) in consideration of equity or debt securities of Licensee sold at market value; (b) to support research or development activities to be undertaken by Licensee; (c) upon the achievement by Licensee of specified milestones or benchmarks relating to the development of Licensed Products (excluding milestones tied to sales or marketing performance, which shall be subject to the percentage-based payments to Caltech herein); (d) for pilot studies; (e) in consideration of the license or sublicense of any intellectual property other than Caltech IP; (f) relating to products other than Licensed Products; or (g) to reimburse patent or other expenses. All Sublicensing

Revenue that Licensee receives in the form of equity that is payable to Caltech shall be converted to cash based on its fair market value.

1.13 **“Technology”** means any technology existing as of the Effective Date, including but not limited to [***], that is requested by Licensee and consented to by Caltech, or that is specifically listed in Exhibit B which may be amended from time to time. Items shall only be considered Technology under this definition for so long as they remain non-public.

1.14 **“Territory”** means throughout the world.

1.15 **“Valid Claim”** means:

- (a) a claim of an issued patent within the Exclusively Licensed Patent Rights or Improvement Patent Rights that has not:
 - (i) expired or been canceled,
 - (ii) been finally adjudicated to be invalid or unenforceable by a decision of a court or other appropriate body of competent jurisdiction (and from which no appeal is or can be taken),
 - (iii) been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise, or
 - (iv) been abandoned in accordance with, or as permitted by, the terms of this Agreement or by mutual written agreement; or
- (b) a claim included in a pending patent application within the Exclusively Licensed Patent Rights or Improvement Patent Rights, which claim is being actively prosecuted in accordance with this Agreement and which has not been:
 - (i) canceled, unless a claim of similar scope is filed in an application claiming priority to an Exclusively Licensed Patent Right;
 - (ii) withdrawn from consideration, except in connection with a restriction requirement unless a claim of similar scope is tiled in a divisional application claiming priority to an Exclusively Licensed Patent Right;

- (iii) finally determined to be unallowable by the applicable governmental authority (and from which no appeal is or can be taken); or
- (iv) abandoned in accordance with., or as permitted by, the terms of this Agreement or by mutual written agreement.

ARTICLE 2
LICENSE GRANT

2.1 **Grant of Rights.** Caltech hereby grants to Licensee and its Affiliates the following licenses:

(a) an exclusive, worldwide, royalty-bearing license with right to sublicense under the Exclusively Licensed Patent Rights and the Improvement Patent Rights to make, have made, import, use, sell, and offer for sale Licensed Products in the Field in the Territory; and

(b) a nonexclusive, worldwide, royalty-bearing license with right to sublicense under the Technology to make, have made, import, use, sell, offer for sale, reproduce, distribute, display, perform, create derivative works of, and otherwise exploit Licensed Products in the Field in the Territory.

These licenses are personal to and nontransferable by Licensee, except as provided in Article 2.3 and 6. Rights not explicitly granted herein are reserved by Caltech.

2.2 **Reservation of Rights; Government Rights.** These licenses are subject to: (a) the reservation of Caltech's right to make, have made, import, and use Licensed Products for noncommercial educational and research purposes, but not for commercial sale or other commercial distribution to third parties; and (b) any existing right of the U.S. Government under Title 35, United States Code, Section 200 et seq. and under 37 Code of Federal Regulations, Section 401 et seq., including but not limited to the grant to the U.S. Government of a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced any invention conceived or first actually reduced to practice in the performance of work for or on behalf of the U.S. Government throughout the world. Licensed Products shall be substantially manufactured in the United States to the extent (if at all) required by 35 U.S.C. Section 204. In addition, Caltech reserves the right to grant the Exclusively Licensed Patent Rights,

Improvement Patent Rights, and associated technology to other non-profit institutions for educational and research purposes, including clinical research.

2.3 **Sublicensing**. Licensee has the right hereunder to grant sublicenses to third parties, but Sublicensees shall not have the right to grant further sublicenses, and the sublicenses may be of no greater scope than the licenses granted under Section 2.1.

Licensee shall require that all sublicenses:

- (a) are subject to the terms and conditions of this Agreement;
- (b) contain the Sublicensee's acknowledgment of the disclaimer of warranty and limitation on Caltech's liability, as provided by Articles 9 and 13 below; and
- (c) contain provisions under which the Sublicensee accepts duties at least equivalent to those accepted by the Licensee in the following Sections: 5.9-5.10 (duty to keep records); 8.7 (duty to properly mark Licensed Products with patent numbers); 9.4 (duty to defend, hold harmless, and indemnify Caltech); 13.2 (duty to maintain insurance); 14.8 (duty to restrict the use of Caltech's name); and 14.9 (duty to control exports).

Licensee shall not receive, or agree to receive, anything of value in lieu of cash or equity from a third party under a sublicense granted pursuant to this Section 2.3 without Caltech's express prior written permission which shall not be unreasonably withheld.

Licensee shall furnish Caltech within [***] days of the execution thereof a true and complete copy of each sublicense and any changes or additions thereto. Licensee shall inform Caltech of each sublicensee's entity status for the determination of fees payable to the U.S. Patent and Trademark Office (USPTO).

Any sublicenses granted by Licensee shall survive termination of the licenses granted in Section 2.1, or of this Agreement, provided that the following conditions are met as of the date of such termination:

- (a) the written agreement between Licensee and Sublicensee pursuant to which the sublicense was granted (i) obligates the Sublicensee to thereafter render to Caltech all sublicense royalties or other sublicense-related consideration that the Sublicensee would have owed to

Licensee under the sublicense to the extent such royalties or other consideration relate to the Exclusively Licensed Patent Rights, Improvement Patent Rights or Technology, (ii) names Caltech as a third party beneficiary, and (iii) affirms that Licensee shall remain responsible for all obligations to Sublicensee (other than those requiring Licensee to hold a license under the Exclusively Licensed Patent Rights, Improvement Patent Rights, or Technology) unless Caltech (at its discretion) elects to assume such obligations;

(b) Licensee informs the Sublicensee in writing (with a copy to Caltech) that the Sublicensee's obligations pursuant to (a) are in effect as a result of the termination; and

(c) the sublicense was granted in accordance with the sublicensing provisions of this Agreement.

Licensee shall be responsible for collecting and paying to Caltech all royalties on Net Revenues and Sublicensing Revenues owed by all Sublicensees.

2.4 **No Other Rights Granted**. The Parties agree that neither this Agreement, nor any action of the Parties related hereto, may be interpreted as conferring by implication, estoppel or otherwise, any license or rights under any intellectual property rights of Caltech other than as expressly and specifically set forth in this Agreement, regardless of whether such other intellectual property rights are dominant or subordinate to the Exclusively Licensed Patent Rights or Improvement Patent Rights.

2.5 **Preferential Purchaser Status**. Caltech shall be entitled to purchase Licensed Products from Licensee for educational, research or other noncommercial purposes on pricing terms that are at least as favorable as any commercial pricing made available by Licensee to any third party.

**ARTICLE 3
RESERVED**

**ARTICLE 4
PROSECUTION OF PATENT APPLICATIONS AND
PAYMENT OF PATENT COSTS**

4.1 **Prosecution by Caltech.** Caltech shall use reasonable efforts, consistent with its normal practices, to: (a) prosecute any and all patent application(s) included in the Exclusively Licensed Patent Rights; and (b) file and prosecute Improvement Patent Rights licensed hereunder for which Caltech or Licensee deems it beneficial to obtain additional coverage, provided that Licensee is reimbursing patent expenses in accordance with Sections 4.4 and 4.5. Licensee may recommend patent counsel for this purpose. Caltech shall permit Licensee to review and request amendments or modifications on all patent applications and claims made therein, and Caltech shall make reasonable efforts to implement such amendments and modifications thereto as may be requested by Licensee prior to filing.

4.2 **Election of Improvements.** With respect to filings pursuant to Section 4.1(b) herein above, Caltech shall promptly disclose such Improvements to Licensee, and Licensee shall elect within [***] days of such disclosure whether such Improvements shall be included within the Improvement Patent Rights, at Licensee's expense. Caltech will have no obligation to prosecute patent applications that may constitute Improvements that are not elected by Licensee. Upon written election by Licensee, the Parties will amend, in a timely manner, Exhibit A hereto to include such Improvements within the Exclusively Licensed Patent Rights.

4.3 **Prosecution by Licensee.** If Caltech declines to file, prosecute or maintain a patent or patent application in the Exclusively Licensed Patent Rights or Improvement Patent Rights, then Licensee may elect, if Caltech consents, with such consent to not be unreasonably withheld, to assume responsibility for such filing, prosecution or maintenance at its expense in Caltech's name, with Caltech remaining the client of record with the prosecuting attorney(s). Licensee shall fully cooperate with any and all other licensees, if any, of the patent or patent application. Caltech agrees to fully cooperate with Licensee in filing, prosecuting, and maintaining any such patent applications and patents, and Caltech agrees to execute any

documents as shall be necessary for such purpose, and not to impair in any way the patentability of any of the foregoing.

4.4 **Past Patent Costs.** Licensee shall reimburse Caltech for all reasonable expenses (including attorneys' fees) incurred by Caltech prior to the Effective Date for the filing, prosecution and maintenance, and interference or reexamination proceedings, of the Exclusively Licensed Patent Rights and Improvement Patent Rights. All amounts owed under this Section 4.4 shall be due [***]. Past patent costs as of the Effective Date are not more than [***] dollars (\$[***]).

4.5 **Ongoing Patent Costs.** Licensee shall reimburse Caltech for all fees and costs relating to ongoing filing, prosecution and maintenance, and interference and reexamination proceedings of the Exclusively Licensed Patent Rights and Improvement Patent Rights that are not included in Section 4.4 above. Such reimbursement shall be made within [***] days of receipt of Caltech's invoice. Should Licensee wish to terminate its license to any particular patent application or patent, Licensee may elect to do so by providing written notice to Caltech at least [***] days in advance. Licensee is responsible for all patent costs incurred up until the date of its election and Licensee's subsequent reimbursement obligations of the ongoing patent costs with respect to said patent application or patent will be terminated. Upon such election, Caltech, may, at its option, continue such prosecution or maintenance, although any patent or patent application resulting from such prosecution or maintenance will thereafter no longer be subject to the licenses granted in Section 2.1 hereunder. In the absence of proper election as described above, nonpayment of any portion of patent costs, whether to Caltech or directly to the prosecuting law firm, will be considered monetary breach pursuant to Section 10.2 if not cured by Licensee within [***] days of Caltech's written notice notifying Licensee of such monetary breach.

4.6 **Foreign Patent Applications.** Caltech shall file and prosecute foreign regional and national patent applications at the request of Licensee, provided that Licensee is reimbursing patent expenses in accordance with Sections 4.4 and 4.5. Caltech may require Licensee to make an advance payment on anticipated foreign patent expenses. In such cases, Licensee will be provided a quote for the expenses, and Licensee shall make an advance payment on the

anticipated expenses within [***] days before the patent applications are filed or patent prosecution actions are due.

ARTICLE 5 CONSIDERATION

5.1 **Timing and Computation**. All royalties hereunder (except for annual minimum royalties) shall be computed [***]. Royalties for [***] shall be due and payable [***].

5.2 **Royalty on Valid Claims**. For any country in which the Exclusively Licensed Patent Rights or Improvement Patent Rights include a Valid Claim where the Licensed Products are made, used, or sold, Licensee shall pay Caltech a royalty of [***]. Royalties due under this Section 5.2 shall be payable on a country-by-country and Licensed Product-by-Licensed Product basis until the expiration of the last-to-expire issued Valid Claim covering such Licensed Product in such country.

5.3 **Royalty on Technology**. For any country in which the Exclusively Licensed Patent Rights or Improvement Patent Rights do not include a Valid Claim, Licensee shall pay Caltech a royalty of [***] for a period of [***] from a first commercial sale.

5.4 **Bundled Products and Services**. In the event that Licensed Products are sold, licensed, distributed or used in combination with one or more other products or services which are not Licensed Products, the Net Revenues for such combination products will be calculated on a country-by-country basis by [***]. If the products or services in the combination that are not Licensed Products have not been sold or licensed separately by Licensee, Sublicensee, or an Affiliate in the relevant quarterly period, Net Revenues shall be calculated by [***]. If the Licensed Product has not been sold or licensed separately by Licensee, Sublicensee, or an Affiliate in the last quarterly period, regardless whether the combination product without the Licensed Product is sold or licensed separately, Net Revenues shall be calculated as [***].

5.5 **Royalty on Sublicensing Revenue**. Licensee shall pay Caltech [***] of the Sublicensing Revenue.

5.6 **Annual Minimum Royalties**. An annual minimum royalty of [***] is due to Caltech on the [***] anniversaries of the Effective Date; [***] is due to Caltech on the [***] anniversaries of the Effective Date; [***] is due to Caltech on the [***] anniversary of the

Effective Date and each anniversary thereof. Any royalties paid under Sections 5.2, 5.3, 5.4 and 5.5 for the [***]-year period preceding the date of payment of the annual minimum royalty shall be creditable against the annual minimum. Caltech shall have the right to terminate this Agreement pursuant to Section 10.2 (Termination for Monetary Breach) for an uncured failure to pay such annual minimum royalty.

5.7 **Third Party Royalty Offset.** If Licensee or an Affiliate is required to make any payment (including, but not limited to, royalties or other license fees) to one or more third parties to obtain a patent license in the absence of which it could not legally make, import, use, sell, or offer for sale Licensed Products in any country, and Licensee provides Caltech with reasonably satisfactory evidence of such third-party payment obligations, then: (a) except as provided in part (b) of this Section 5.7, [***] of such third-party payments shall be creditable against royalties owed to Caltech hereunder, provided that the maximum royalty reduction in each year shall be no more than [***] of royalty payments owed by Licensee to Caltech; and (b) if such third party payments are for patents applications or patents owned by Caltech, including the patent rights referenced in Exhibit C, [***] of such third-party payments shall be creditable against royalties owed to Caltech hereunder, provided that the maximum royalty reduction in each year shall be no more than [***] of royalty payments owed by Licensee to Caltech. Any amount exceeding the annual maximum royalty reduction may be carried over and credited against royalties owed in future years, subject in every case to the [***] annual cap or [***] of the annual cap, as the case may be, for that year.

5.8 **Currency Conversion.** For the purpose of determining royalties payable under this Agreement, any Net Revenues or Sublicensing Revenue denominated in currencies other than U.S. dollars shall be converted into U.S. dollars according to the noon buying rate of the Federal Reserve Bank of New York on the last business day of the quarterly period for which such royalties are calculated.

5.9 **Recordkeeping and Audits.** Licensee shall keep complete and accurate production and accounting records relating to commercialization (including via sublicensing) of Licensed Products. Caltech shall be entitled to periodically audit such records, during Licensee's normal business hours, to determine Licensee's compliance with the provisions of this Article 5. Licensee shall reimburse Caltech [***] of any unpaid royalties resulting from any

noncompliance discovered as a result of any such audit; and Licensee shall also pay Caltech an additional [***] of the entire amount of any underpayment exceeding [***] of the corresponding amount previously paid. Such audits shall be at Caltech's expense, and shall occur no more than once annually, except that in the case of any underpayment exceeding [***] of the amount actually paid: (a) Licensee shall reimburse Caltech for the cost of such audit; and (b) Caltech shall be entitled to conduct additional quarterly audits, at Licensee's expense, until any such audit demonstrates that Licensee is in compliance with its obligations. Licensee must flow this requirement down to all Sublicensees.

5.10 **Royalty Reports.** For so long as royalties are payable under this Agreement, Licensee shall provide a royalty report in writing to Caltech on or before [***] of each year. The report shall include, for all Licensed Products that are sold or otherwise distributed by Licensee, Affiliates, and each Sublicensee, on a country-by-country basis:

- (a) a description of all Licensed Products;
- (b) number of Licensed Products sold;
- (c) total revenues from each of the Licensed Products received by Licensee, Affiliates, and Sublicensees;
- (d) Deductible Expenses for each of the Licensed Products;
- (e) Net Revenues from Licensed Product(s);
- (f) royalties on Net Revenues due to Caltech;
- (g) Sublicensing Revenue, including supporting data;
- (h) foreign currency conversion rate and calculations (if applicable) and total royalties due; and
- (i) names and contact information for all Sublicensees having a sublicense or option therefor any time during the particular royalty period.

Each such report shall also set forth an explanation of the calculation of the royalties payable hereunder and be accompanied by payment of the royalties shown by said report to be due Caltech.

5.11 **Preferred Stock Grant.** Licensee agrees to irrevocably issue to Caltech, in partial consideration of Licensee's receipt of the licenses granted under this Agreement, two thousand eight hundred thirty (2,830) shares of Series B Preferred Stock (the "Licensee Stock"), of Licensee pursuant to a subscription agreement between Licensee and Caltech. As a condition to the issuance of the Licensee Stock, Caltech shall become a party of each of (a) the Second Amended and Restated Investors' Rights Agreement, dated June 17, 2016, among Licensee, its investors and certain other stockholders of Licensee (the "Investors Rights Agreement"), (b) the Second Amended and Restated Right of First Refusal and Co-Sale Agreement, dated June 17, 2016, among Licensee, its investors and certain other stockholders of Licensee (the "ROFR/Co-Sale Agreement") and (c) Second Amended and Restated Voting Agreement, dated June 17, 2016, among Licensee, its investors and certain other stockholders of Licensee (the "Voting Agreement") by executing and delivering to Licensee a joinder agreement to each such agreement. Caltech shall receive the piggy-back registration rights granted to other holders of Licensee's Series B Preferred Stock set forth in the Investors Rights Agreement on the terms set forth therein and solely for the purposes of the Investors Rights Agreement, shall be treated as a Major Investor (as defined therein). Stock certificates representing the Licensee Stock shall be delivered to Caltech within [***] days of issuance.

5.12 **Participation Rights.** Caltech shall receive the same participation rights granted to other holders of Licensee's Series B Preferred Stock set forth in the Investors Rights Agreement on the terms set forth therein.

5.13 **Transfer Restrictions.** Caltech agrees that, in the event of any underwritten or public offering of securities of Licensee or an Affiliate, Caltech shall comply with and agree to any legally required restriction on the transfer of its equity interest, or any part thereof, imposed by the underwriter, and shall perform all acts and sign all necessary documents required with respect thereto. Other than the foregoing, the Investors Rights Agreement, the ROFR/Co-Sale Agreement and the Voting Agreement, Caltech shall not be restricted from transferring its equity

interest to any entity in any manner not prohibited by law or Licensee's bylaws or certificate of incorporation.

5.14 **Semi-Annual Updates**. Licensee agrees to provide Caltech on a semi-annual basis with access to copies of the materials distributed to its board of directors in connection with meetings of the board of directors of Licensee ("Board") as well as meeting minutes provided to members of the Board; provided, however, that Licensee reserves the right to withhold or redact any information if (a) access to such information could adversely affect the attorney-client privilege between Licensee and its counsel; or (b) access to such information could result in disclosure of trade secrets to Caltech. In connection with the foregoing, Caltech agrees to (i) hold in confidence and trust and to act in a fiduciary manner and (ii) not use any for any purpose other than to manage its shares of stock, in either case all information provided to it or learned by it in connection with its rights pursuant to this Section and, except to the extent otherwise required by law; provided that if use or disclosure is required by law Caltech gives Licensee prompt written notice of the requirement prior to the disclosure and assistance in obtaining an order protecting the information from public disclosure.

ARTICLE 6 ASSIGNMENT AND TRANSFER

6.1 **"Assign"** (including all variations thereof) shall mean to transfer, including Assignment of rights and delegation of duties.

6.2 **Assignment by Caltech**. This Agreement shall be binding upon and inure to the benefit of any successor or Assignee of Caltech.

6.3 **Assignment by Licensee**. Licensee cannot Assign this Agreement without the prior written consent of Caltech, except that Licensee may Assign this Agreement without the prior written consent of Caltech to any Affiliate or any successor of, or purchaser or acquirer of substantially all of, the assets or operations of its business to which this Agreement pertains. Any permitted Assignee shall succeed to all of the rights and obligations of Licensee under this Agreement.

6.4 **Any Other Assignment by Licensee.** Any other attempt to Assign this Agreement or to pledge any of the license rights granted in this Agreement as a security for any creditor by Licensee is null and void from the beginning.

6.5 **Conditions of Assignment.** Prior to any Assignment, the following conditions must be met:

(a) Licensee must give Caltech prompt written notice of the Assignment, including the new Assignee's contact information; and

(b) the new Assignee must agree in writing to Caltech to be bound by this Agreement; and

(c) Coincident with an Assignment, Licensee shall pay to Caltech an Assignment Fee ("Assignment Fee") according to the following schedule:

(i) For any Assignment for which the underlying transaction results in aggregate net proceeds to Licensee of more than [***], the Assignment Fee shall be [***];

(ii) For any Assignment for which the underlying transaction results in aggregate net proceeds to Licensee of less than or equal to [***], the Assignment Fee shall be the greater of: (i) [***] of Licensee's aggregate net proceeds, or (ii) [***]; or

(iii) For any Assignment, any cash received by Caltech from any equity interest that Caltech may have in Licensee or an Affiliate at the time of such Assignment will be credited against the Assignment Fee due to Caltech.

6.6 **After the Assignment.** Upon a permitted Assignment by Licensee of this Agreement pursuant to this Article, Licensee will be released of liability under this Agreement and the term "Licensee" in this Agreement will mean the Assignee.

**ARTICLE 7
DUE DILIGENCE**

7.1 **Commercialization.** Licensee agrees to use commercially reasonable efforts to commercially introduce and reasonably fulfill market demand for Licensed Products in the Field. Licensee shall be deemed to have satisfied its obligations under this Section 7.1 if Licensee has an ongoing and active research, development or marketing program, directed primarily toward clinical or commercial production, use, and sale of one or more Licensed Products. Any efforts of Licensee's Affiliates or Sublicensees shall be considered efforts of Licensee for the sole purpose of determining Licensee's compliance with its obligation under this Section 7.1.

7.2 **Reporting.** On each yearly anniversary of the Effective Date, Licensee shall issue to Caltech a detailed written report on its progress in introducing commercial Licensed Product(s). Such report shall include any milestone that has been achieved, and any milestone that was due but not achieved. The report will be considered confidential information of Licensee subject to Article 11.

7.3 **Failure to Commercialize.** If Licensee is not fulfilling its obligations under Section 7.1 with respect to a Licensed Product in the Field, and Caltech so notifies Licensee in writing, Caltech and Licensee shall discuss additional efforts to be taken by Licensee. Licensee may remedy any failure to use commercially reasonable efforts by implementing the agreed-upon actions or at Licensee's option, with Caltech's consent, agreeing to pay Caltech increased annual minimums in lieu of the minimums provided in the first sentence of Section 5.6 as follows: an annual minimum royalty of [***] on the [***] anniversaries of the Effective Date; [***] on the [***] anniversaries of the Effective Date; and [***] on the [***] anniversary of the Effective Date and each anniversary thereof. If Licensee has not cured, or is not using reasonable efforts to cure, within [***] days of Caltech's notice, then Caltech shall have the right to terminate pursuant to Section 10.

**ARTICLE 8
LITIGATION**

8.1 **Enforcement.** Both Caltech and Licensee agree to promptly notify the other in writing should either party become aware of possible infringement by a third party of the Exclusively Licensed Patent Rights or Improvement Patent Rights. Upon notice and exchange of

evidence of such infringement, Licensee and Caltech shall meet and confer to discuss how best to proceed with enforcement. During that meeting, Licensee may request that Caltech take steps to enforce the Exclusively Licensed Patent Rights or Improvement Patent Rights in the Field. Caltech has first right to bring suit. If Caltech does not, within [***] months of such request, elect to file an action against the alleged infringer in the Field, Licensee will have all rights required by law to initiate an enforcement action in Licensee's name at Licensee's expense. Licensee shall be entitled to control any such action initiated by it, but will keep Caltech apprised of the status of such action or suit, and will consult with Caltech should any issues arise in litigation that may affect Caltech or other Caltech licensees. If Caltech is required by law to join in such an action, or is subject to discovery requests in such an action, it will do so provided that: (a) Caltech will be represented by outside counsel of its choice; and (b) Licensee shall reimburse Caltech for all out-of-pocket expenses (including Caltech's outside counsel) and all internal Caltech expenses in connection with the action. Licensee may take appropriate action to terminate or prevent the infringement provided, however, that Licensee may not bring an action or enter into a settlement agreement with an accused infringer without prior written approval of Caltech, where approval will not be unreasonably withheld.

8.2 **Other Defensive Litigation.** If a declaratory judgment action alleging invalidity, unenforceability or non-infringement of any of the Exclusively Licensed Patent Rights or Improvement Patent Rights is brought against Licensee and/or Caltech, Caltech shall have the first right to control the defense of such action at its own expense. Licensee may elect to control the defense of such action if Caltech declines to do so, and if Licensee so elects it shall bear all the costs of the action and shall make settlements only with the advice and written consent of Caltech. If mutually agreed between the Parties, Licensee may also undertake the defense of any interference, opposition or similar procedure with respect to the Exclusively Licensed Patent Rights or Improvement Patent Rights, providing that Licensee bears all the costs thereof and makes settlements only with the advice and written consent of Caltech.

8.3 **Cooperation.** In the event either party takes control of a legal action or defense pursuant to Sections 8.1 or 8.2 (thus becoming the Controlling Party), the non-controlling party shall fully cooperate with and supply all assistance reasonably requested by the Controlling Party, including by: (a) using commercially reasonable efforts to have its employees consult and

testify when requested; (b) making available relevant records, papers, information, samples, specimens, and the like; and (c) joining any such action in which it is an indispensable party. The Controlling Party shall bear the reasonable expenses (including salary and travel costs) incurred by the non-controlling party in providing such assistance and cooperation. The Controlling Party shall keep the non-controlling party reasonably informed of the progress of the action or defense. If the non-controlling party is not required by law to join the action, that party shall nevertheless be entitled to participate in such action or defense at its own expense and using counsel of its choice. As a condition of controlling any action or defense involving the Exclusively Licensed Patent Rights or Improvement Patent Rights pursuant to Sections 8.1 or 8.2, Licensee shall use its best efforts to preserve the validity and enforceability thereof.

8.4 **Settlement.** If Licensee controls any action or defense under Section 8.1 or 8.2, then Licensee shall have the right to settle any claims thereunder, but only upon terms and conditions that are reasonably acceptable to Caltech. Should Licensee elect to abandon such an action or defense other than pursuant to a settlement with the alleged infringer that is reasonably acceptable to Caltech, Licensee shall give timely advance notice to Caltech who, if it so desires, may continue the action or defense.

8.5 **Recoveries.** Any amounts paid by third parties to Caltech or Licensee as the result of an action or defense pursuant to Sections 8.1 or 8.2 (including in satisfaction of a judgment or pursuant to a settlement) shall first be applied to reimbursement of the unreimbursed expenses (including attorneys' fees and expert fees) incurred by each party. In the event that Caltech is the Controlling Party, [***]. In the event that Licensee is the Controlling Party, any remainder shall be divided between the Parties as follows:

- (a) [***]; and
- (b) [***].

8.6 **Infringement Defense.** If Licensee, its Affiliate or Sublicensee, distributor or other customer is sued by a third party charging infringement of patent rights that cover a Licensed Product, Licensee will promptly notify Caltech. Licensee will be responsible for the expenses of, and will be entitled to control the defense or settlement of, any such action(s).

8.7 **Marking.** Licensee agrees to mark the Licensed Products with the numbers of applicable issued patents within the Exclusively Licensed Patent Rights or Improvement Patent Rights, unless such marking is commercially infeasible in accordance with normal commercial practices in the Field, in which case the Parties shall cooperate to devise a commercially reasonable alternative to such marking.

8.8 **Expiration or Abandonment.** In a case where one or more patents or particular claims thereof within the Exclusively Licensed Patent Rights or Improvement Patent Rights expire, or are abandoned, or are declared invalid or unenforceable by a court of last resort or by a lower court from whose decree no appeal is taken, or certiorari is not granted within the period allowed therefor, then the effect thereof hereunder shall be:

(a) that such patents or particular claims shall, as of the date of expiration or abandonment or final decision as the case may be, cease to be included within the Exclusively Licensed Patent Rights or Improvement Patent Rights for the purpose of this Agreement; and

(b) that such construction so placed upon the Exclusively Licensed Patent Rights or Improvement Patent Rights by the court shall be followed from and after the date of entry of the decision, and royalties shall thereafter be payable by Licensee only in accordance with such construction.

8.9 **Adjustment.** In the event that any of the contingencies provided for in Section 8.8 occurs, Caltech agrees to renegotiate in good faith with Licensee a reasonable royalty rate under the remaining Exclusively Licensed Patent Rights or Improvement Patent Rights which are unexpired and in effect and under which Licensee desires to retain a license.

8.10 **Licensee Challenges.** If Licensee or any of its Affiliates brings an action or proceeding, or assists any third party in bringing an action or proceeding, seeking a declaration or ruling that any claim in any of the Exclusively Licensed Patent Rights or Improvement Patent Rights is invalid or unenforceable, or asserts that any product does not infringe the Exclusively Licensed Patent Rights or Improvement Patent Rights:

(a) during the pendency of such action or proceeding, the royalty rate will be increased to [***];

(b) should the outcome of such action or proceeding determine that any such claim challenged by Licensee is valid, enforceable, and/or infringed by a Licensed Product, the royalty rate will be increased to [***] and Licensee shall pay Caltech's attorneys' fees, expert witness fees, court costs, third-party costs, and other litigation expenses;

(c) Licensee shall have no right to recoup any royalties paid before such action or proceeding or during the period in which such action or proceeding is pending (including on appeal);

(d) Licensee shall not pay royalties into any escrow or other similar account, but rather shall continue to pay royalties directly to Caltech; and

(e) Caltech shall have full control and authority to defend the Exclusively Licensed Patent Rights and Improvement Patent Rights in the action or proceeding.

Licensee shall provide written notice to Caltech at least [***] days before Licensee or any of its Affiliates initiates any action or proceeding seeking a declaration or ruling that any claim within the Exclusivity Licensed Patent Rights or Improvement Patent Rights is invalid or unenforceable or that any product would not infringe (but for this Agreement) any claim in the Exclusively Licensed Patent Rights or Improvement Patent Rights. Licensee will include with such written notice an identification of all prior art it believes is material.

Any dispute regarding the validity or enforceability of any of the Exclusively Licensed Patent Rights or Improvement Patent Rights, or whether any product would infringe (but for this Agreement) any claim in the Exclusively Licensed Patent Rights or Improvement Patent Rights, shall be litigated exclusively in the U.S. District Court for the Central District of California situated in the County of Los Angeles, and each Party hereby agrees to submit to the exclusive jurisdiction of such court, and waives any objection to venue, for such purposes.

ARTICLE 9
REPRESENTATIONS AND WARRANTIES; INDEMNIFICATION

9.1 **Representations and Warranties of Caltech.** Caltech hereby represents and warrants to Licensee that, to the knowledge of Caltech's Office of Technology Transfer and Corporate Partnerships, as of the Effective Date:

- (a) there are no outstanding exclusive licenses, exclusive options or exclusive agreements of any kind relating to the Exclusively Licensed Patent Rights in the Field, other than pursuant to this Agreement herein;
- (b) Caltech has the power to grant the rights, licenses and privileges granted herein and can perform as set forth in this Agreement without violating the terms of any agreement that Caltech has with any third party; and
- (c) Caltech has not received notice that the practice of the Technology will infringe any third party rights.

9.2 **Exclusions.** The Parties agree that nothing in this Agreement shall be construed as, and CALTECH HEREBY DISCLAIMS, ANY EXPRESS OR IMPLIED REPRESENTATION, WARRANTY, COVENANT, OR OTHER OBLIGATION:

- (a) THAT ANY PRACTICE BY OR ON BEHALF OF LICENSEE OF ANY INTELLECTUAL PROPERTY LICENSED HEREUNDER IS OR WILL BE FREE FROM INFRINGEMENT OF RIGHTS OF THIRD PARTIES;
- (b) AS TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT OF THIRD PARTY RIGHTS, WITH RESPECT TO ANY TECHNOLOGY PROVIDED BY CALTECH TO LICENSEE HEREUNDER.

9.3 **Indemnification by Caltech.** Caltech shall indemnify, defend and hold harmless Licensee from and against any and all losses, damages, costs and expenses (including attorneys' fees) arising out of a material breach by Caltech of its representations and warranties ("Indemnification Claims"), except to the extent involving or relating to a material breach by Licensee of its representations and warranties, provided that: (a) Caltech is notified promptly of

any Indemnification Claims; (b) Caltech has the sole right to control and defend or settle any litigation within the scope of this indemnity; and (c) all indemnified parties cooperate to the extent necessary in the defense of any Indemnification Claims. The foregoing shall be the sole and exclusive remedy of Licensee for breach of Section 9.1.

9.4 **Indemnification by Licensee.** Licensee shall indemnify, defend and hold harmless Caltech, its trustees, officers, agents and employees from and against any and all losses, damages, costs and expenses (including reasonable attorneys' fees) arising out of third party claims brought against Caltech relating to the manufacture, sale, licensing, distribution or use of Licensed Products by or on behalf of Licensee or its Affiliates, except to the extent involving or relating to a material breach by Caltech of its representations and warranties, provided that: (a) Licensee is notified promptly of any Indemnification Claims; (b) Licensee has the sole right to control and defend any litigation within the scope of this indemnity; and (c) all indemnified parties cooperate to the extent necessary in the defense of any Indemnification Claims.

9.5 **Certain Damages.** NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES ARISING OUT OF THIS AGREEMENT, HOWEVER CAUSED, UNDER ANY THEORY OF LIABILITY.

ARTICLE 10 TERM AND TERMINATION

10.1 **Term.** This Agreement and the rights and licenses hereunder shall take effect on the Effective Date and continue until the expiration, revocation, invalidation, or unenforceability of the Exclusively Licensed Patent Rights and Improvement Patent Rights licensed to Licensee hereunder, or as long as royalties are due pursuant to Article 5 of this Agreement, unless earlier terminated pursuant to the terms of this Agreement.

10.2 **Termination for Monetary Breach.** Caltech shall have the right to terminate this Agreement and the rights and licenses hereunder if Licensee fails to make any payment due including patent expenses, annual minimum royalties or royalties hereunder and Licensee continues to fail to make the payment (either to Caltech directly or by placing any disputed amount into an interest-bearing escrow account to be released when the dispute is resolved) for a

period of [***] days after receiving written notice from Caltech specifying Licensee's failure. Upon any such termination, (a) Licensee shall have [***] months to complete the manufacture of any Licensed Products that are then works in progress for sale and to sell its inventory of Licensed Products, provided that Licensee pays the applicable royalties. and (b) any sublicenses shall survive termination in accordance with Section 2.3.

10.3 **Termination for Non-Monetary Breach.** Non-monetary breach shall include, but is not limited to: (a) failure to fulfill the obligations in Article 7 (Due Diligence) or Section 8.7 (Marking); and (b) pursuit of exploitation of Exclusively Licensed Patent Rights or Improvement Patent Rights outside of the Field. Non-monetary breach shall include the cessation of Licensee's operations in general, or the cessation of Licensee's commercial activities in the Field in particular. If this Agreement is materially breached by either party, the non-breaching party may elect to give the breaching party written notice describing the alleged breach. If the breaching party has not cured such breach within [***] days after receipt of such notice, the notifying party will be entitled, in addition to any other rights it may have under this Agreement, to terminate this Agreement and the rights and licenses hereunder; such termination shall be deemed to have been effective as of the date of the material breach.

10.4 **Bankruptcy or Insolvency.** This Agreement shall terminate upon written notice, (a) upon Licensee's filing for bankruptcy, receivership, or bankruptcy proceedings or any other proceedings for the settlement of Licensee's debts; (b) upon Licensee making an assignment for the benefit of creditors; or (c) upon Licensee's dissolution or ceasing to do business. Caltech may terminate this Agreement upon the insolvency of the Licensee. Licensee must inform Caltech of its intention to file a voluntary petition of bankruptcy, or of another's intention to file an involuntary petition of bankruptcy, at least [***] days prior to the filing of such a petition. Licensee's filing without conforming to this requirement shall be deemed a material, pre-petition incurable breach of this Agreement which will cause this Agreement to terminate without notice upon such filing.

10.5 **Accrued Liabilities.** Termination of this Agreement for any reason shall not release any party hereto from any liability which, at the time of such termination, has already accrued to the other party or which is attributable to a period prior to such termination, nor

preclude either party from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued or are based upon any event occurring prior to such termination.

10.6 **Survival.** The following shall survive any expiration or termination (in whole or in part) of this Agreement: (a) any provision plainly indicating that it should survive; (b) any royalty due and payable on account of activity prior to the termination; and (c) Sections or Articles 5.9, 5.12, 5.14, 9, 11, 12, 13, and 14.7.

ARTICLE 11 CONFIDENTIALITY

11.1 **Nondisclosure and Nonuse.** Each party agrees not to disclose any of the terms of this Agreement to any third party without the prior written consent of the other party, not to be unreasonably withheld, delayed or conditioned.

11.2 **Permitted Disclosures.** Notwithstanding the foregoing, each party may disclose: (a) confidential information as required by securities or other applicable laws or pursuant to governmental proceedings, provided that the disclosing party gives advance written notice to the other party and reasonably cooperates therewith in limiting the disclosure to only those third parties having a need to know; and (b) the fact that Licensee has been granted a license under the Exclusively Licensed Patent Rights and Improvement Patent Rights.

ARTICLE 12 DISPUTE RESOLUTION

12.1 No issue of the validity of any of the licensed patents, enforceability of any of the licensed patents, infringement of any of the licensed patents, the scope of any of the claims of the licensed patents or any dispute that includes any such issue, shall be subject to mediation under this Agreement unless otherwise agreed by the Parties in writing. In addition, no dispute between the Parties as to any matter relating to this Agreement shall be subject to arbitration unless otherwise agreed by the Parties in writing.

12.2 Except for those issues and disputes described in Section 10.2, any dispute between the Parties concerning the interpretation, construction or application of any terms, covenants or conditions of this Agreement shall be resolved by mediation.

12.3 Mediation shall be in the Los Angeles office of ADR Services, Inc. (<http://www.adrservices.org/>) before an attorney or a retired judge with experience in intellectual property or patent matters, and contract, commercial or business disputes, selected by the Parties from candidates proposed by ADR Services, Inc. in accordance with the ADR Mediation Rules and Procedures in force at the time the mediation is initiated.

12.4 The requirement for mediation shall not be deemed a waiver of any right of termination under this Agreement.

12.5 Each party shall bear its own expenses incurred in connection with any attempt to resolve disputes hereunder, but the compensation and expenses of the mediator shall be borne equally.

ARTICLE 13 PRODUCT LIABILITY

13.1 **Indemnification.** Licensee agrees that Caltech (including its trustees, officers, faculty and employees) shall have no liability to Licensee, its Affiliates, their customers or any third party for any claims, demands, losses, costs, or other damages which may result from personal injury, death, or property damage related to the Licensed Products ("Product Liability Claims"). Licensee agrees to defend, indemnify, and hold harmless Caltech, its trustees, officers, faculty and employees from any such Product Liability Claims, provided that: (a) Licensee is notified promptly of any Product Liability Claims; (b) Licensee has the sole right to control and defend or settle any litigation within the scope of this indemnity; and (c) all indemnified parties cooperate to the extent necessary in the defense of any Claims.

13.2 **Insurance.** Prior to such time as Licensee begins to manufacture, sell, license, distribute or use Licensed Products, Licensee shall at its sole expense procure and maintain policies of comprehensive general liability insurance in amounts not less than [***] per incident and [***] in annual aggregate, and naming those indemnified under Section 13.1 as additional insureds. Such comprehensive general liability insurance shall provide: (a) product liability coverage and (b) broad form contractual liability coverage for Licensee's indemnification of Caltech under Section 13.1. In the event the aforesaid product liability coverage does not provide for occurrence liability, Licensee shall maintain such comprehensive general liability insurance

for a reasonable period of not less than [***] years after it has ceased commercial distribution or use of any Licensed Product. Licensee shall provide Caltech with written evidence of such insurance upon request of Caltech.

13.3 **Loss of Coverage.** Licensee shall provide Caltech with notice at least [***] days prior to any cancellation, non-renewal or material change in such insurance, to the extent Licensee receives advance notice of such matters from its insurer. If Licensee does not obtain replacement insurance providing comparable coverage within [***] days following the date of such cancellation, non-renewal or material change, Caltech shall have the right to terminate this Agreement effective at the end of such [***] day period without any additional waiting period; provided that if Licensee provides credible written evidence that it has used reasonable efforts, but is unable, to obtain the required insurance, Caltech shall not have the right to terminate this Agreement, and Caltech instead shall cooperate with Licensee to either (at Caltech's discretion) grant a limited waiver of Licensee's obligations under this Article or assist Licensee in identifying a carrier to provide such insurance or in developing a program for self-insurance or other alternative measures.

ARTICLE 14 MISCELLANEOUS

14.1 **Notices.** All notices, requests, demands and other communications hereunder shall be in English and shall be given in writing and shall be: (a) personally delivered; (b) sent by telecopier, facsimile transmission or other electronic means of transmitting written documents with confirmation of receipt; or (c) sent to the Parties at their respective addresses indicated herein by registered or certified mail, return receipt requested and postage prepaid, or by private overnight mail courier services with confirmation of receipt. The respective addresses to be used for all such notices, demands or requests are as follows:

(a) If to CALTECH, to:

California Institute of Technology
1200 East California Boulevard
Mail Code 6-32
Pasadena, CA 91125
ATTN: [***]

Phone No.: [***]
Fax No.: [***]
Email: [***]

Or to such other person or address as Caltech shall furnish to Licensee in writing.

(b) If to LICENSEE, to:

Isoplexis Corporation
35 North East Industrial Road
Branford, CT 06405
ATTN: [***]

Phone No.: [***]
Email: [***]

If personally delivered, such communication shall be deemed delivered upon actual receipt by the “attention” addressee or a person authorized to accept for such addressee; if transmitted by facsimile pursuant to this Section 14.1, such communication shall be deemed delivered the next business day after transmission, provided that sender has a transmission confirmation sheet indicating successful receipt at the receiving facsimile machine; if sent by overnight courier pursuant to this Section 14.1, such communication shall be deemed delivered upon receipt by the “attention” addressee or a person authorized to accept for such addressee; and if sent by mail pursuant to this Section 14.1, such communication shall be deemed delivered as of the date of delivery indicated on the receipt issued by the relevant postal service. If the Licensee fails or refuses to accept delivery by courier or mail at the address most recently provided under this Section 14.1, communication shall be deemed delivered as of the date of such failure or refusal. Any party to this Agreement may change its address for the purposes of this Agreement by giving notice thereof in accordance with this Section 14.1.

14.2 **Entire Agreement.** This Agreement sets forth the complete agreement of the Parties concerning the subject matter hereof. No claimed oral agreement in respect thereto shall be considered as any part hereof. No amendment or change in any of the terms hereof subsequent to the execution hereof shall have any force or effect unless agreed to in writing by duly authorized representatives of the Parties.

14.3 **Waiver.** No waiver of any provision of this Agreement shall be effective unless in writing. No waiver shall be deemed to be, or shall constitute, a waiver of a breach of any other

provision of this Agreement, whether or not similar, nor shall such waiver constitute a continuing waiver of such breach unless otherwise expressly provided in such waiver.

14.4 **Severability**. Each provision contained in this Agreement is declared to constitute a separate and distinct covenant and provision and to be severable from all other separate, distinct covenants and provisions. It is agreed that should any clause, condition or term, or any part thereof, contained in this Agreement be unenforceable or prohibited by law or by any present or future legislation then: (a) such clause, condition, term or part thereof, shall be amended, and is hereby amended, so as to be in compliance with the legislation or law; but (b) if such clause, condition or term, or part thereof, cannot be amended so as to be in compliance with the legislation or law, then such clause, condition, term or part thereof shall be severed from this Agreement and all the rest of the clauses, terms and conditions or parts thereof contained in this Agreement shall remain unimpaired.

14.5 **Construction**. The headings in this Agreement are inserted for convenience only and shall not constitute a part hereof. Unless expressly noted, the term “include” (including all variations thereof) shall be construed as merely exemplary rather than as a term of limitation.

14.6 **Counterparts/Facsimiles**. This Agreement may be executed in one or more counterparts, all of which taken together shall be deemed one original. Facsimile and scanned signatures shall be deemed original.

14.7 **Governing Law**. This Agreement, the legal relations between the Parties and any action, whether contractual or non-contractual, instituted by any party with respect to matters arising under or growing out of or in connection with or in respect of this Agreement shall be governed by and construed in accordance with the internal laws of the State of California, excluding any conflict of law or choice of law rules that may direct the application of the laws of another jurisdiction, and be brought in the state or federal courts in Los Angeles, California.

14.8 **No Endorsement**. Licensee agrees that it shall not make any form of representation or statement which would constitute an express or implied endorsement by Caltech or the Jet Propulsion Laboratory (JPL) of any Licensed Product, and that it shall not authorize others to do so, without first having obtained written approval from Caltech, except as may be required by governmental law, rule or regulation.

14.9 **Export Regulations.** This Agreement is subject in all respects to the laws and regulations of the United States of America, including the Export Administration Act of 1979, as amended, and any regulations thereunder. Licensee, its Affiliates, or its Sublicensees will not in any form export, re-export, resell, ship, divert, or cause to be exported, re-exported, resold, shipped, or diverted, directly or indirectly, any product or technical data or software of the other party, or the direct product of such technical data or software, to any country for which the United States Government or any agency thereof requires an export license or other governmental approval without first obtaining such license or approval.

14.10 **Force Majeure.** Neither party shall lose any rights hereunder or be liable to the other party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, governmental acts or orders or restrictions, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not caused by the negligence or intentional conduct or misconduct of the nonperforming party, and such party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a party be required to settle any labor dispute or disturbance.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed:

CALIFORNIA INSTITUTE OF TECHNOLOGY (Caltech)

Date: Mar 8 - 2017

By: /s/ Frederic Farina

Name: Frederic Farina

Title: Chief Innovation Officer

Date: 3/3/17

ISOPLEXIS CORPORATION (Licensee)

By: /s/ Sean Mackay

Name: Sean Mackay

Title: Chief Executive Officer

Exhibit A

Exclusively Licensed Patent Rights

[***]

Exhibit B
Technology

[***]

Exhibit C

Patent Rights owned by Caltech and licensed to Licensee by a Third Party

[***]

[***] Certain information in this document has been excluded pursuant to Regulation S-K, Item 601(b)(10). Such excluded information is not material and is the type that the registrant customarily and actually treats as private and confidential.

Patent Purchase Agreement

This Patent Purchase Agreement (the "Agreement") is entered into this 12th day of May 2021 (the "Effective Date") by and between QIAGEN Sciences, LLC, a Delaware limited liability company with its principal place of business at 19300 Germantown Road, Germantown, MD 20874 ("QIAGEN Sciences"), and QIAGEN GmbH, a German corporation with its principal place of business at QIAGEN Strasse 1, 40724 Hilden, Germany ("QIAGEN GmbH") (QIAGEN Sciences, and QIAGEN GmbH collectively and individually referred to herein as ("SELLER") and Isoplexis Corporation, with its principal place of business at 35 North East Industrial Road, Branford, CT 06405, USA ("BUYER"). SELLER or BUYER may be referred herein as a Party or collectively the "Parties".

WHEREAS, SELLER is the owner of patent families as set forth in Schedule I (collectively, the "Patents").

WHEREAS, BUYER desires to acquire and purchase the Patents under the provisions of this Agreement, and

WHEREAS, SELLER is willing to transfer and sell the Patents to BUYER under said provisions of this Agreement.

Now, therefore, in consideration of the mutual agreements, promises and covenants set forth herein, and other good and valuable consideration, the receipt and adequacy of which are acknowledged, the Parties hereto, intending to be legally bound, agree as follows:

§ 1 Definitions

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

- 1.1 "Affiliate" of a Party shall mean
 - a) an organization, which directly or indirectly Controls a Party;
 - b) an organization, which is directly or indirectly Controlled by a Party;
 - c) an organization, which is Controlled, directly or indirectly, by the ultimate parent company of a Party;
 "Control" as per a) to c) is defined as owning fifty percent or more of the voting stock of a company or having otherwise the power to govern the financial and the operating policies or to appoint the management of an organization.
- 1.2 "Assignment Date" shall have the meaning set forth in Section 2.1.
- 1.3 "Patent(s)" shall mean the patents and patent applications set forth in Schedule 1, including any and all priority documents, continuations, continuations-in-part, extensions, divisionals, renewals, substitutes, reissues and re-examinations of any of the aforementioned, foreign counterparts thereof, patents issuing therefrom and patents and patent applications claiming priority therefrom anywhere in the world.
- 1.4 "Third Party" shall mean any individual, corporation, partnership, trust or other business or government organization or entity, any other recognized organization or entity other than SELLER, BUYER and any of their Affiliates.

- 1.5 “Bulk Reagents” means the bulk reagents supplied to IsoPlexis for its barcode reading application pursuant to the Supply Agreement as set forth below:

[***]

§ 2 Sale and Transfer of Patents

- 2.1. Effective upon receipt of the consideration required under Section 2.2 hereof (the date of which, will be termed the “Assignment Date”), SELLER, for itself and its Affiliates, hereby irrevocably sells and assigns, subject to the terms in sections 2, 3 and 6, to BUYER and BUYER hereby purchases from SELLER and its Affiliates, all right, privileges, title and interest in and to the Patents, along with the inventions described and claimed in the Patents, and all rights to income, royalties and damages for infringement of the Patents whether occurring or accrued prior to, on or after the Assignment Date.
- 2.2 In consideration of the assignment pursuant to Section 2.1 above, BUYER shall pay a purchase price of Twenty Million US Dollars (USD \$20,000,000) (“Initial Purchase Price”) to SELLER within five (5) business days after the Effective Date.
- 2.3 All payments required under this Agreement are exclusive of any applicable federal, state and local taxes. Each of the Parties shall be responsible for the payment of taxes and other assessments for which such Party is liable under Applicable Law.
- 2.4 Payment of the Initial Purchase Price shall be effected via wire transfer free of costs and charges to the following bank account of SELLER:

Account holder:	[***]
Bank:	[***]
Account:	[***]
ABA:	[***]
SWIFT:	[***]

§ 3 Additional Provisions on Sale and Transfer of Patents

- 3.1 Within [***] days after the Effective Date BUYER and SELLER will enter into a separate Supply Agreement on terms substantially consistent with those set forth in the draft Supply Agreement as mutually agreed between BUYER and SELLER immediately prior to the execution of this Agreement or as otherwise mutually agreed upon in writing between BUYER and SELLER.
- 3.2 Each Party has the right but not the obligation to issue a mutually agreeable press release (the “**Announcement Press Release**”) announcing the transaction set forth in this Agreement within [***] days of the Effective Date.

§4 Registration of Rights

- 4.1 The Parties will cooperate in the registration of the transfer of the Patents and SELLER will, upon receipt of the consideration required in Section 2.2 above, undertake to properly execute all necessary filings or other acts BUYER needs to effect for such registration or otherwise to carry out the purpose and intent of the Agreement.

4.2 SELLER shall pay any maintenance or other fees required to keep the Patents in force until the Assignment Date. BUYER shall bear all costs and expenses which are required to maintain the Patents in force after the Assignment Date including the costs for registration of the transfer of the Patents to BUYER.

§5 Representations and Warranties; Indemnity

5.1 SELLER represents and warrants that:

- 5.1.1 it has all lawful rights and powers necessary to enter into this Agreement and to sell and transfer the Patents hereunder.
- 5.1.2 With the exception of the covenant not to sue in §6.1 of the Agreement or any other third-party rights disclosed to BUYER by SELLER in writing or of which BUYER has actual knowledge the Patents are not subject to any liens or encumbrances, security interests, mortgages, pledges, licenses, option agreements and SELLER has not entered into any agreement that restricts its ability to transfer the Patents in accordance with this Agreement.
- 5.1.3 SELLER, as of the Effective Date, owns all right, title and interest in and to all of the Patents.
- 5.1.4 Each Patent listed in Schedule 1 is subsisting and unexpired, and has not been abandoned.
- 5.1.5 SELLER or an Affiliate thereof has made all appropriate filings and registrations (including disclosures to the U.S. Patent and Trademark Office with regard to all material prior art) and taken all appropriate actions in connection with obtaining and maintaining each Patent, all to the best of SELLER's knowledge.
- 5.1.6 SELLER has the ability to deliver to BUYER pursuant to Section 4.1, the complete file associated with obtaining and maintaining each Patent, including each document constituting a communication to or from any relevant patent office or other competent authority regarding any Patent.
- 5.1.7 All actions, as of the Effective Date, necessary to obtain, maintain or otherwise avoid abandonment of any Patent due to be completed within [***] days after the Effective Date have been listed in Schedule 1.
- 5.1.8 SELLER or an Affiliate thereof has obtained a written assignment to SELLER or an Affiliate thereof for each Patent from the former owner (if acquired from a Third Party) and from all inventors of all inventions disclosed in each Patent, and SELLER or an Affiliate thereof (or if acquired from a Third Party such Third Party) has recorded or registered each such assignment to the extent permitted or required by applicable law to confirm and preserve SELLER's title to each Patent.
- 5.1.9 SELLER has not received within the [***] period preceding the Effective Date any claims, notices, or communications alleging or asserting that the Patents, know-how, or Bulk Reagents infringe any third-party intellectual property rights.

Except for the representations set forth above, SELLER makes no further representations or warranties as to the validity, merchantability or fitness for any other purpose of the Patents.

- 5.2 WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED. SELLER MAKES NO REPRESENTATION OR WARRANTY THAT THE PATENTS, KNOW-HOW OR BULK REAGENTS WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.
IN NO EVENT WILL SELLER BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BUYER'S EXERCISE OF THIS AGREEMENT OR USE OF BULK REAGENTS.

§6 Miscellaneous

- 6.1 BUYER and any potential successor irrevocably covenants that it will not assert any claims against or sue SELLER or SELLER's Affiliates or SELLER's customers based on a claim that SELLER's products or the manufacture, use or sale thereof in the Field fall within the scope of one or more of the Patents. "Field" shall mean develop, have developed, manufacture, have manufactured, use, have used, commercialize, or have commercialized any products and services on SELLER's [***], [***], or improvements and/or modifications thereof. SELLER and any potential successor irrevocably covenants that it will not assert any claims against or sue BUYER or BUYER's Affiliates or BUYER's customers based on a claim that BUYER's products, BUYER's use, manufacture, or sale of products or services utilizing or exploiting the Bulk Reagents or the Patents.
- 6.2 This Agreement shall be governed by the laws of the State of Delaware (USA) without giving effect to any conflict of laws principle.
- 6.3 Subject to Section 6.4, each Party hereby irrevocably and unconditionally submits itself for any legal action or proceeding relating to this Agreement to which it is a party, or for recognition and enforcement of any judgment in respect thereof, to the exclusive general jurisdiction of the Courts of the State of Delaware, USA.
- 6.4 Should either Party violate or fail to perform any material term or covenant of this Agreement, the non-defaulting Party shall give written notice of such default to the defaulting Party. The Parties shall then use their best efforts to resolve the dispute and alleged default. If the Parties cannot settle such dispute within an objectively reasonable period of time, then either party may proceed to litigation of the dispute in accordance with the provisions of Section 6.3.
- 6.5 Should any provision of this Agreement be or become invalid, ineffective or unenforceable as a whole or in part, the validity, effectiveness and enforceability of the remaining provisions shall not be affected thereby. Any such invalid, ineffective or unenforceable provision shall, to the extent permitted by law, be deemed replaced by such valid, effective and enforceable provision as comes closest to the economic intent and purpose of such invalid, ineffective or unenforceable provision. The aforesaid shall apply mutatis mutandis to any gap in this Agreement.
- 6.6 The Parties, and the performance of their obligations hereunder, shall at all times during the Term comply with all Applicable Law.

6.7 Addresses for purpose of giving notice are as set forth immediately below, or such other addresses as may be designated in writing by the Parties from time to time during the term of this Agreement:

If to SELLER:

QIAGEN Sciences LLC
19300 Germantown Road
Germantown, MD 20874

Attn.: Legal department

IsoPlexis Corporation
35 N.E. Industrial Road
Branford, CT 06482

Attn.: Sean Mackay, CEO

CC: Legal department

- 6.9 The Parties are independent contractors. Neither Party nor its employees, consultants, contractors or agents are agents, fiduciaries, employees or joint ventures of the other, nor do they have any authority to bind the other Party by contract or otherwise to any obligation and will not represent to the contrary, either expressly, implicitly, by appearance or otherwise.
- 6.10 This Agreement, including all schedules and exhibits, constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes and replaces all prior or contemporaneous understandings or agreements, written or oral, regarding such subject matter. No amendment to or modification of this Agreement shall be binding unless in writing and signed by a duly authorized representative of each Party.
- 6.10 This Agreement shall inure to the benefit of and be binding upon and enforceable by the Parties and their successors. However, neither Party may assign or delegate any of its rights or obligations under this Agreement without the prior written consent of the other, except that such rights and obligations may be assigned or delegated by either Party to any Affiliate whose performance of this Agreement is guaranteed by the assigning Party or to a corporation or other business which acquires all or substantially all of the assets of that Party to which this Agreement relates.
- 6.11 The Parties (each a "**Receiving Party**") agree to keep any information they receive from the respective other Party ("**Disclosing Party**"), which is either expressly marked confidential or which may reasonably be regarded as confidential information of the Disclosing Party, including information on the existence and contents of this Agreement, ("**Confidential Information**"), strictly confidential and not to disclose it to any third party for an unlimited term.

6.12 The above obligation of confidentiality shall not be applicable to the extent:

6.12.1. the Confidential Information is general public knowledge or becomes general or public knowledge through no fault of the Receiving Party (it being agreed that any information included in the Announcement Press Release (and any information substantially consistent with the information included therein) shall not be considered Confidential Information hereunder); or

6.12.2 the Confidential Information can be shown by the Receiving Party by its written records to have been in its possession prior to receipt thereof hereunder; or

6.12.3 the Confidential Information is lawfully disclosed to the Receiving Party by a third party which is not subject to a confidentiality obligation vis-à-vis the Disclosing Party; or

6.12.4 the Confidential Information is, based on the advice of the Receiving Party's outside legal counsel, required to be disclosed by applicable law (including, for the avoidance of doubt, the requirements of any federal securities laws), regulation, stock exchange rule or by the terms of a subpoena or order issued by a court or other governmental body or similar legal process pursuant to applicable law ("Legally Compelled"); provided, however, that (x) the Receiving Party notifies the Disclosing Party reasonably promptly (and in any event prior to any disclosure) of the existence, terms and circumstances surrounding such requirement and the information the Receiving Party intends to disclose, (y) the Receiving Party cooperates with the Disclosing Party (at the Disclosing Party's expense) to take reasonable measures to protect the Disclosing Party's Confidential Information from disclosure, and (z) if disclosure of such Confidential Information is required, the Receiving Party will disclose only such information as it is advised by its outside legal counsel is Legally Compelled to be disclosed.

6.12.5 the Agreement is required to be disclosed in SELLERS ongoing litigation with Illumina.

6.13 Subject to Sections 3.2 and 6.12, no Party shall make any public announcement or other disclosure concerning the transactions contemplated herein, or make any public statement which includes the name of the other Party or any of its Affiliates, or otherwise use the name of another Party or any of its Affiliates in any public statement or document, except as may, based on the advice of the outside legal counsel of the Party intending to make such public announcement or disclosure, be Legally Compelled (it being understood that such Party will, if practicable under the circumstances, consult with such other Party prior to disclosure), without the prior written consent of the other Party; provided, however, that BUYER (a) may make any filing necessary or useful, including of documents concerning the transactions contemplated herein and including the name of SELLER, SELLER Affiliates and their employees, as necessary to record the assignment of the Patents and carry out the purpose and intent of this Agreement, (b) disclose this Agreement or its terms to any Third Party in connection with asserting the Patents in any litigation or other dispute, or in any transaction or potential transaction involving the Patents, including a settlement agreement or license agreement and (c) may make any public announcement or other disclosure to the extent such public announcement or other disclosure contains solely information previously disclosed in the Announcement Press Release (and any information substantially consistent with the information included therein).

6.14 This Agreement may be executed in duplicate originals at the convenience of the Parties.

6.15 The covenant not to sue granted under or pursuant to this Agreement by BUYER to SELLER is, and shall otherwise be deemed to be, for purposes of Section 365(n) of the Bankruptcy Code (11 U.S.C. Section 101 et seq.), licenses of rights to "intellectual property" as defined therein. The Parties agree that SELLER, as receiver of such rights, shall retain and may fully exercise all of its rights and elections under the Bankruptcy Code. The Parties further agree that, in the event that any proceeding shall be instituted by or against BUYER seeking to adjudicate it a bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief or composition of it or its debts under any law relating to bankruptcy, insolvency or reorganization or relief of debtors, or seeking an entry of an order for relief or Appointment of a receiver, trustee or other similar official for it or any substantial part of its property or it shall take any action to authorize any of the foregoing actions (each a "Proceeding"), SELLER shall have the right to retain and enforce its rights under this Agreement

IN WITNESS WHEREOF BUYER and SELLER have executed this Agreement by their respective officers hereunto duly authorized on the day and year written below.

QIAGEN SCIENCES LLC

ISOPLEXIS CORPORATION

By: /s/ Roland Sackers

By: /s/ Sean Mackay

Print Name: Roland Sackers

Print Name: Sean Mackay

Title: CFO

Title: CEO

QIAGEN GmbH

By: /s/ Roland Sackers

Print Name: Roland Sackers

Title: CFO

/s/ QIAGEN Legal

/s/ QIAGEN Finance Department

Schedule 1

Patents

[***]

November 18, 2019

John Strahley

Dear John,

I am very pleased to provide you with a summary of the terms and conditions of your anticipated employment by IsoPlexis Corporation (the "Company"). The following sets forth the proposed terms and conditions of your offer of employment. We hope that you choose to join the Company and look forward to a mutually beneficial relationship.

1. Position. Subject to the successful completion of a customary background and reference check, the Company hereby engages you in a full-time position as Chief Financial Officer and to provide such services as are consistent with the scope of such position and such other services as requested by the Company from time to time. You will be expected to devote full-time to the performance of your duties at the Company throughout your employment, and we expect that you will perform any and all of your duties and responsibilities in a satisfactory manner and to the best of your abilities at all times.

2. Starting Date; Location. If you accept this offer, your employment with the Company will begin on or before **December 20, 2019**. You will perform your duties and responsibilities of employment generally out of Branford, Connecticut. You will be reimbursed for approved business expenses in accordance with the Company's policies and procedures relating to claims for such reimbursement.

3. At-Will Relationship. Your employment with the Company is "at will", meaning that both the Company and you have the right to terminate the employment relationship at any time for any reason. Accordingly, no provision of this offer letter shall be construed to create an express or implied employment contract, or a promise of employment for any specific period of time. Although your job duties, title, compensation, benefits (if any), as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and an authorized executive officer of the Company.

4. Compensation; Benefits. Your initial base pay shall be \$250,000 annually, prorated for 2019, less payroll deductions and applicable withholdings. In addition, you will annually be granted twenty (20) days of paid personal time off (PTO) and you may also be eligible for a cash bonus up to 20% of your annual salary, both prorated for 2019, dependent upon performance and at the discretion of the Company's Board of Directors. You may also be eligible for health benefits offered by the Company subject to your fulfillment of any eligibility and plan requirements.

5. Equity Grant. Subject to approval by the Board of Directors of the Company (the "Board"), you will be granted an option to purchase twelve thousand five hundred (12,500) shares of the Company's Common Stock pursuant to the Company's Stock Plan (the "Plan") and the terms of an Option Agreement which will provide for vesting terms over a forty-eight (48) month period.

6. Severance. In the event that (i) you are terminated by Company other than for cause during the term of your employment with Company prior to the occurrence of a Change in Control, as defined below; or (ii) you are terminated by Company or its successor in interest other than for cause within the twelve (12) month period following the occurrence of a Change in Control (the occurrence of either (i) or (ii) hereinafter referred to as the "Severance Trigger Date"), you will be entitled to a paid severance in the amount of six (6) months of your base salary at the time of such Severance Trigger Date, less applicable tax and customary payroll withholdings (the "Severance"); provided however, that your eligibility for such Severance will be conditioned upon your agreement to the terms of Company's (or its successor in interest's) reasonable and standard form of severance agreement. Nothing herein shall be deemed to (i) modify in any manner the at-will nature of your employment with Company; (ii) require Company or any successor in interest to terminate your employment upon the occurrence of a Change in Control; or (iii) prohibit Company or any successor in interest from terminating your employment upon a Change in Control or otherwise. A "Change in Control" shall mean the sale of all or substantially all of the assets of Company; any merger, consolidation or acquisition of Company with, by or into another corporation, entity or person; or any change in the ownership of more than fifty percent (50%) of the voting capital stock of Company in one or more related transactions.

7. Your Certifications. As a condition of your employment, you hereby certify to the Company that: (a) you are free to enter into and fully perform the duties of your position and that you are not subject to (i) any employment, confidentiality, non-competition or other agreement or (ii) any order, judgment or injunction, in either case, that would prohibit or otherwise restrict your performance for the Company; (b) all facts you have presented or will present to the Company are accurate and true, including, but not limited to, all oral and written statements you have made on any job application, resume or c.v., or in any interview or discussion with the Company.

8. Eligibility to Work. Your employment with the Company is conditioned on your eligibility to work for the Company in the offered position in the United States. Prior to or on the first day of your employment, you must complete Form I-9 for Employment Eligibility Verification, and provide to the Company any means of verification noted on the "List of Acceptable Documents." Both the Form I-9 and the List of Acceptable Documents are enclosed for your information.

9. Confidentiality, Inventions and Non-Competition Agreement. The Company considers the protection of its confidential information, proprietary materials and goodwill to be extremely important. Accordingly, you will be required to execute and abide by the enclosed Confidentiality, Non-Competition and Invention Assignment Agreement, as a condition of this offer of employment.

10. Miscellaneous. This offer letter constitutes our entire offer regarding the terms and conditions of your prospective employment with the Company. It supersedes any prior agreements, or other promises or statements (whether oral or written) regarding the offered terms of employment. The terms of your employment shall be governed by the law of the State of Connecticut. BY ACCEPTING THIS OFFER OF EMPLOYMENT, YOU AGREE THAT ANY CONTROVERSY, DISPUTE OR CLAIM ARISING OUT OF ANY ASPECT OF YOUR EMPLOYMENT WITH THE COMPANY, OR ANY SEPARATION OF EMPLOYMENT (WHETHER VOLUNTARY OR INVOLUNTARY) FROM THE COMPANY, SHALL BE RESOLVED IN A COURT OF COMPETENT JURISDICTION IN CONNECTICUT BY A JUDGE ALONE, AND YOU HEREBY WAIVE AND RENOUNCE YOUR RIGHT TO A TRIAL BEFORE A CIVIL JURY.

11. Severability & Waiver. If any provisions of the agreement shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a

court finds that any provision of this agreement is invalid or unenforceable, but that by limiting such provision it would become valid or enforceable, then such provision shall be deemed to be written construed and enforced as so limited. The failure of either party to enforce any provision of this agreement shall not be construed as a waiver or limitation of that party's right to subsequently enforce such agreement.

You may accept this offer of employment by signing the enclosed additional copy of this offer letter. Your delivery of a signed copy of this offer letter and the enclosed executed Confidentiality, Non-Competition and Invention Assignment Agreement to me will evidence your agreement with the terms and conditions set forth herein and therein.

We are pleased to offer you the opportunity to join the Company. We are confident that you will make an important contribution to our unique and exciting enterprise.

Sincerely,

/s/ Sean Mackay

Sean Mackay
Co-Founder and CEO
IsoPlexis Corporation

AGREED TO AND ACKNOWLEDGED
AS OF THE DATE SET FORTH ABOVE:

/s/ John Strahley

John Strahley

May 5, 2020

Peter Siesel

Dear Peter,

I am very pleased to provide you with a summary of the terms and conditions of your anticipated employment by IsoPlexis Corporation (the "Company"). The following sets forth the proposed terms and conditions of your offer of employment. We hope that you choose to join the Company and look forward to a mutually beneficial relationship.

1. Position. Subject to the successful completion of a customary background and reference check, the Company hereby engages you in a **full-time exempt** position as **Chief Commercial Officer** and to provide such services as are consistent with the scope of such position and such other services as requested by the Company from time to time. You will be expected to devote full-time to the performance of your duties at the Company throughout your employment, and we expect that you will perform any and all of your duties and responsibilities in a satisfactory manner and to the best of your abilities at all times.

2. Starting Date; Location. If you accept this offer, your employment with the Company will begin on or before **May 18, 2020**. You will perform your duties and responsibilities of employment generally out of your home office and customer site locations. You will be reimbursed for approved business expenses in accordance with the Company's policies and procedures relating to claims for such reimbursement.

3. At-Will Relationship. Your employment with the Company is "at will", meaning that both the Company and you have the right to terminate the employment relationship at any time for any reason. Accordingly, no provision of this offer letter shall be construed to create an express or implied employment contract, or a promise of employment for any specific period of time. Although your job duties, title, compensation, benefits (if any), as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and an authorized executive officer of the Company.

4. Compensation; Benefits. Your initial base pay shall be **\$275,000** annually less payroll deductions and applicable withholdings. In addition, you will annually be granted **fifteen (15)** days of paid vacation (PTO) prorated for the year 2020 and you may also be eligible for a **forty percent (40%)** cash bonus, prorated for 2020, dependent upon performance and at the discretion of the Company's Board of Directors (the "Board"). You are also eligible for health benefits offered by the Company subject to your fulfillment of any eligibility and plan requirements.

5. Equity Grant. Subject to approval by the Board at its next regularly scheduled meeting, you will be granted an option to purchase **6,500** (six thousand five hundred) shares of the Company's Common Stock (the "Grant") pursuant to the Company's Stock Plan (the "Plan") and the terms of an Option Agreement which will provide for vesting terms over a forty-eight (48) month period. Additionally, subject to approval by the Board, you will be granted an option to purchase **3,500** (three thousand five hundred) shares of the Company's Common Stock (the "Incentive

Grant”) pursuant to the Plan and the terms of an Option Agreement which will provide for vesting terms over a forty-eight (48) month period, where such vesting shall be conditioned upon the Company meeting the calendar year 2020 revenue target set forth in the Company’s 2020 revenue plan as defined by the Board (the “Revenue Target”). The Revenue Target as of the date of this letter is eighteen million (\$18,000,000) dollars in total net revenue. In the event that the Board directs, in its discretion, that the Revenue Target be reduced for any reason, the Incentive Grant will be amended to provide you with the benefit of such reduction as applicable to your milestone-conditioned vesting.

6. Your Certifications. As a condition of your employment, you hereby certify to the Company that: (a) you are free to enter into and fully perform the duties of your position and that you

are not subject to (i) any employment, confidentiality, non-competition or other agreement or (ii) any order, judgment or injunction, in either case, that would prohibit or otherwise restrict your performance for the Company; (b) all facts you have presented or will present to the Company are accurate and true, including, but not limited to, all oral and written statements you have made on any job application, resume or c.v., or in any interview or discussion with the Company or its recruiting agent. The Company acknowledges that you have disclosed the terms related to non-solicitation of employees and customers set forth in Sections 12(a) and 12(b) of your most recent prior employment agreement. You hereby certify that you will not engage in conduct on behalf of the Company which would be in violation of such terms.

7. Eligibility to Work. Your employment with the Company is conditioned on your eligibility to work for the Company in the offered position in the United States. Prior to or on the first day of your employment, you must complete Form I-9 for Employment Eligibility Verification and provide to the Company any means of verification noted on the “List of Acceptable Documents.” Both the Form I-9 and the List of Acceptable Documents are enclosed for your information.

8. Confidentiality, Inventions and Non-Competition Agreement. The Company considers the protection of its confidential information, proprietary materials and goodwill to be extremely important. Accordingly, you will be required to execute and abide by the enclosed Confidentiality, Non-Competition and Invention Assignment Agreement, as a condition of this offer of employment.

9. Miscellaneous. This offer letter constitutes our entire offer regarding the terms and conditions of your prospective employment with the Company. It supersedes any prior agreements, or other promises or statements (whether oral or written) regarding the offered terms of employment. The terms of your employment shall be governed by the law of the State of Connecticut. BY ACCEPTING THIS OFFER OF EMPLOYMENT, YOU AGREE THAT ANY CONTROVERSY, DISPUTE OR CLAIM ARISING OUT OF ANY ASPECT OF YOUR EMPLOYMENT WITH THE COMPANY, OR ANY SEPARATION OF EMPLOYMENT (WHETHER VOLUNTARY OR INVOLUNTARY) FROM THE COMPANY, SHALL BE RESOLVED IN A COURT OF COMPETENT JURISDICTION IN CONNECTICUT BY A JUDGE ALONE, AND YOU HEREBY WAIVE AND RENOUNCE YOUR RIGHT TO A TRIAL BEFORE A CIVIL JURY.

10. Severability & Waiver. If any provisions of the agreement shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision of this agreement is invalid or unenforceable, but that by limiting such provision it would become valid or enforceable, then such provision shall be deemed to be written

construed and enforced as so limited. The failure of either party to enforce any provision of this agreement shall not be construed as a waiver or limitation of that party's right to subsequently enforce such agreement.

You may accept this offer of employment by signing the enclosed additional copy of this offer letter. Your delivery of a signed copy of this offer letter and the enclosed executed Confidentiality, Non-Competition and Invention Assignment Agreement to me will evidence your agreement with the terms and conditions set forth herein and therein.

We are pleased to offer you the opportunity to join the Company. We are confident that you will make an important contribution to our unique and exciting enterprise.

Sincerely,

/s/ Sean Mackay

Sean Mackay
Co-Founder and CEO
IsoPlexis Corporation

AGREED TO AND ACKNOWLEDGED
AS OF THE DATE SET FORTH ABOVE:

/s/ Peter Siesel

Peter Siesel

Subsidiaries of IsoPlexis Corporation

Entity Name

IsoPlexis Corporation UK Limited

Jurisdiction of Organization

United Kingdom

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Registration Statement on Form S-1 of our report dated May 13, 2021, relating to the financial statements of IsoPlexis Corporation. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Deloitte & Touche LLP

Hartford, Connecticut

July 20, 2021