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

# FORM 10-K

**(Mark One)**

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the year ended December 31, 2017**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from to**

**Commission File Number: 001-36571**

# T2 Biosystems, Inc.

**(Exact name of registrant as specified in its charter)**

| **Delaware** | **20-4827488** |
|---|---|
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification No.)** |
| **101 Hartwell Avenue, Lexington, MA** | **02421** |
| **(Address of principal executive offices)** | **(Zip code)** |

**Registrant's telephone number, including area code: 781-761-4646**
**Securities registered pursuant to Section 12(b) of the Act**

| **Title of Each Class:** | **Name of Each Exchange on which Registered:** |
|---|---|
| **Common Stock, par value $0.001 per share** | **The NASDAQ Stock Market LLC (NASDAQ Global Market)** |

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933, as amended. YES ☐ NO ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended. YES ☐ NO ☒

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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 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 | ☐ | Accelerated filer | ☒ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☐ |
| | | Emerging growth company | ☒ |

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Yes ☒ No ☐

As of June 30, 2017, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates was approximately $58.6 million based on the closing price for the common stock of $3.21 on that date. Shares of common stock held by each executive officer, director, and their affiliated stockholders have been excluded from this calculation as such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the registrant's common stock on March 14, 2018 was 36,019,800. The common stock is listed on the NASDAQ Global Market (trading symbol "TTOO").

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive Proxy Statement to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year are incorporated by reference into Part III of this report.

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## FORWARD-LOOKING STATEMENTS

*This Annual Report on Form 10-K contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. All statements other than statements of historical facts contained in this Annual Report on Form 10-K, including statements regarding our future results of operations and financial position, business strategy, prospective products and product candidates, their expected performance and impact on healthcare costs, marketing clearance from the U.S. Food and Drug Administration, or the FDA, regulatory clearance, reimbursement for our product candidates, research and development costs, timing of regulatory filings, timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated products, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.*

*In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "forecast," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this Annual Report on Form 10-K are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to a number of risks, uncertainties and assumptions described under the sections in this Annual Report on Form 10-K entitled "Item 1A.—Risk Factors". These forward looking statements are subject to numerous risks, including, without limitation, the following:*

- *our status as an early stage company;*

- *our expectation to incur losses in the future;*
- *the market acceptance of our T2MR technology;*
- *our ability to timely and successfully develop and commercialize our existing products and future product candidates;*
- *the length and variability of our anticipated sales cycle;*
- *our limited sales history;*
- *our ability to gain the support of leading hospitals and key thought leaders and publish the results of our clinical trials in peer-reviewed journals;*
- *our ability to successfully manage our growth;*
- *our future capital needs and our ability to raise additional funds;*
- *the performance of our diagnostics;*
- *our ability to compete in the highly competitive diagnostics market;*
- *our ability to obtain marketing clearance from the FDA or regulatory clearance for new product candidates in the United States or any other jurisdiction;*
- *federal, state, and foreign regulatory requirements, including diagnostic product reimbursements and FDA regulation of our product candidates;*
- *our ability to protect and enforce our intellectual property rights, including our trade secret-protected proprietary rights in T2MR;*
- *our ability to recruit, train and retain key personnel;*
- *our dependence on third parties;*
- *our ability to continue as a going concern;*
- *manufacturing and other product risks;*
- *the impact of the adoption of new accounting standards; and*
- *the Tax Cuts and Jobs Act of 2017 (Tax Reform)*

*These forward-looking statements represent our estimates and assumptions only as of the date of this Annual Report on Form 10-K. Unless required by U.S. federal securities laws, we do not intend to update any of these forward-looking statements to reflect circumstances or events that occur after the statement is made or to conform these statements to actual results. The following discussion should be read in conjunction with the financial statements and notes thereto appearing elsewhere in this Annual Report on Form 10-K. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors.*

*You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, 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 "Item 1A.—Risk Factors" section of this Annual Report on Form 10-K, 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.*

**PART I.**

**Item 1. BUSINESS**

**Overview**

We are an *in vitro* diagnostics company that has developed an innovative and proprietary technology platform that offers a rapid, sensitive and simple alternative to existing diagnostic methodologies. We are using our T2 Magnetic Resonance technology, or T2MR, to develop a broad set of applications aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier. T2MR enables rapid detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, plasma, serum, saliva, sputum and urine, and can detect cellular targets at limits of detection as low as one colony forming unit per milliliter, or CFU/mL. Our initial development efforts target sepsis and Lyme disease, which are areas of significant unmet medical need in which existing therapies could be more effective with improved diagnostics.

On September 22, 2014, we received market clearance from the U.S. Food and Drug Administration, or the FDA, for our first two products, the T2Dx Instrument, or the T2Dx and the T2Candida Panel, which have the ability to rapidly identify the five clinically relevant species of *Candida*, a fungal pathogen known to cause sepsis. In the United States, we have built a direct sales force that is primarily targeting the top 1,200 hospitals with the highest concentration of patients at risk for sepsis-related infections. Internationally, we have primarily partnered with distributors that target large hospitals in their respective international markets.

Three additional diagnostic applications in development are called T2Bacteria, T2Resistance and T2Lyme, which are focused on bacterial sepsis infections and Lyme disease, respectively. In late 2015 we initiated the collection of patient blood samples to support the clinical trial for T2Bacteria, and in early 2017, we initiated a multi-site clinical trial for T2Bacteria. On September 8, 2017 the Company filed a 510(k) premarket submission for the T2Bacteria Panel with the FDA. We expect that existing reimbursement codes will support our sepsis and Lyme disease product candidates, and that the anticipated economic savings associated with our sepsis products will be realized directly by hospitals.

Sepsis is one of the leading causes of death in the United States, claiming more lives annually than breast cancer, prostate cancer, and AIDS combined, and it is the most expensive hospital-treated condition. Most commonly afflicting immunocompromised, critical care, and elderly patients, sepsis is a severe inflammatory response to a bacterial or fungal infection with a mortality rate of approximately 30%. Based on data published by the U.S. Department of Health and Human Services in 2017, the cost of sepsis was over $27 billion in the United States, building on data from 2013 demonstrating that sepsis was responsible for approximately 5% of the total aggregate costs associated with domestic hospital stays. Sepsis is typically caused by one or more of five *Candida* species or over 25 bacterial pathogens, and effective treatment requires the early detection and identification of these specific target pathogens in a patient's bloodstream. Today, sepsis is typically diagnosed through a series of blood cultures followed by post-blood culture species identification if a blood culture tests positive. These methods have substantial diagnostic limitations that lead to a high rate of false negative test results, a delay of up to several days in administration of targeted treatment, and the incurrence of unnecessary hospital expense. In addition, the Survey of Physicians' Perspectives and Knowledge About Diagnostic Tests for Bloodstream Infections in 2015 reported that negative blood culture results are only trusted by 36% of those physicians. Without the ability to rapidly identify pathogens, physicians typically start treatment of at-risk patients with broad-spectrum antibiotics and switch therapies every 12 to 24 hours if a patient is not responding. These drugs, which can be costly, are often ineffective and unnecessary and have contributed to the spread of antimicrobial resistance. The speed to getting the patient on the right targeted therapy is critical. According to a study published by Critical Care Medicine in 2006, in sepsis patients with documented hypotension, administration of effective antimicrobial therapy within the first hour of detection was associated with a survival rate of 79.9% and, over the ensuing six hours, each hour of delay in initiation of treatment was associated with an average decrease in survival of 7.6%.

We believe our sepsis products, which include T2Candida and our product candidate, T2Bacteria, will redefine the standard of care in sepsis management while lowering healthcare costs by improving both the precision and the speed of detection of sepsis-causing pathogens. According to a study published in the Journal of Clinical Microbiology in 2010, targeted therapy for patients with bloodstream infections can be delayed up to 72 hours due to the wait time for blood culture results. In another study published in Clinical Infectious Diseases in 2012, the delayed administration of appropriate antifungal therapy was associated with higher mortality among patients with septic shock attributed to *Candida* infection and, on that basis, the study concluded that more rapid and accurate diagnostic techniques are needed.

Our pivotal clinical trial demonstrated that T2Candida can deliver actionable results in as few as three hours, with an average time to result during the trial of 4.2 hours, compared to the average time to result of one to six or more days typically required for blood-culture-based diagnostics. We believe the speed of the T2Candida test will enable physicians to potentially make treatment decisions and administer targeted treatment to patients in four to six hours versus 24 to 144 hours for blood culture. We believe that our product candidate, T2Bacteria, will also deliver actionable results in similar timeframes because this diagnostic panel operates similarly to T2Candida and is designed to run on the same instrument as T2Candida.

Data from our pivotal clinical trial for T2Bacteria was presented at the Association of Molecular Pathology annual meeting in November 2017. Results from the trial demonstrated that the T2Bacteria Panel can deliver actionable results in an average of 5.4 hours, compared to an average of 60 hours for detecting the same species by blood culture. In addition, T2Bacteria identified 63 infected patients that were missed by the paired blood culture that was simultaneously run. The reported sensitivity was 96%, compared to a sensitivity of 38% for the paired blood culture as measured by the total of 102 patients with confirmed infections by any culture result. In November 2015, the Company presented preliminary data demonstrating the ability of our T2Bacteria Panel product candidate to provide the rapid and sensitive identification of certain sepsis-causing

bacteria included in the panel, directly from whole blood. The bacteria species included in the product candidate currently under review by the FDA are *Staphylococcus aureus, Enterococcus faecium, Escherichia coli, Klebsiella pneumoniae, and Pseudomonas aeruginosa.* The five bacteria species in our T2Bacteria Panel are responsible for about half of all septic infections. Additionally, when combined with the use of T2Candida and the practice of empirically administering broad spectrum antibiotics, the rapid detection of these bacteria may enable 90% of patients with sepsis to receive rapid and appropriate therapy. The T2Bacteria Panel that is CE Marked includes *A. baumannii*, which has an estimated incidence rate of 3.6% in Europe, far higher than the 1% incidence rate in the United States.

*Candida* is the fourth leading hospital-acquired bloodstream infection, afflicting more than 135,000 patients per year in the United States, and the most lethal form of common bloodstream infections that cause sepsis, with an average mortality rate of approximately 40%. This high mortality rate is largely due to a delay in providing targeted therapy to the patient due to the elapsed time from *Candida* infection to positive diagnosis. According to a study published in Antimicrobial Agents and Chemotherapy, the *Candida* mortality rate can be reduced to 11% with the initiation of targeted therapy within 12 hours of presentation of symptoms. Additionally, a typical patient with a *Candida* infection averages 40 days in the hospital, including nine days in intensive care, resulting in an average cost per hospital stay of more than $130,000 per patient. In a study published in the American Journal of Respiratory and Critical Care Medicine, providing targeted antifungal therapy within 24 hours of the presentation of symptoms decreased the length of hospital stay by approximately ten days and decreased the average cost of care by approximately $30,000 per patient. Furthermore, in April 2015, Future Microbiology published the results of an economic study regarding the use of T2Candida conducted by IMS Health, a healthcare economics agency. In that economic study, IMS demonstrated that an average hospital admitting 5,100 patients at risk for *Candida* infections could save approximately $5.8 million annually due to decreased hospital stays for patients, reduction in use of antifungal drugs and other associated savings. The economic study further showed T2Candida can potentially reduce the costs of care by $26,887 per *Candida* patient and that rapid detection of *Candida* reduces patient deaths by 60.6%. Results from a data analysis of T2Candida for the detection and monitoring of *Candida* infection and sepsis were published comparing aggregated results from the use of T2Candida to blood culture-based diagnostics for the detection of invasive candidiasis and candidemia. The analysis included samples acquired from more than 1,900 patients. Out of 55 prospective patient cases that were tested with T2Candida and blood culture and determined to be positive or likely to be positive for a *Candida* infection, T2Candida detected 96.4% of the patients (53 cases) compared to detection of 60% of the patients (33 cases) with blood culture. During 2016, a number of T2Candida users presented data on their experiences with the T2Candida Panel which demonstrated both the clinical and economic benefits of use of the T2Candida Panel in the diagnostic regimen. The Henry Ford Health System in Detroit, Michigan reported data on a pre- and post-T2Candida implementation analysis that covered 6 months of clinical experience. The data showed a statistically significant ($p = 0.009$) seven day reduction in median Intensive Care Unit, or ICU, length of stay per positive patient that was identified as positive for *Candida* after implementation of the T2Candida test panel and a trend ($p = 0.164$) of total hospital length of stay reduction of four days. The data also showed significant reductions in use of antifungal drugs for negative patients tested with T2Candida. The overall economic savings resulting from these clinical benefits was projected to be approximately $2.3 million on an annualized basis. The Lee Health System in Fort Myers, Florida compared patient and economic experience before and after T2Candida implementation. The data demonstrated that in the post-T2Candida cohort, median length of stay for patients with *Candida* infections was reduced by 7 days when detected by T2Candida while unnecessary antifungal therapy was avoided in 41% of patients tested and was discontinued after one dose in another 15% of patients tested. The economic savings derived solely from reduction in antifungal drug use was $195 per patient tested, net of the cost of the T2Candida test panel. Huntsville Hospital in Huntsville, Alabama, reported that the use of the T2Candida test panel resulted in a reduction in the duration of therapy and time to de-escalation in patients that tested negative for *Candida* on the T2Candida test panel, yielding net pharmacy savings of approximately $280 per patient tested. T2Candida also detected 56% more positive patients than blood culture. Riverside Community Hospital in Riverside, California, demonstrated improvements in time to appropriate therapy, increased sensitivity, and rapid discontinuation of antifungal therapy when using T2Candida. Specifically, 83% of patients who tested positive with T2Candida received appropriate therapy within six hours of the blood draw and 100% of patients received appropriate therapy in under nine hours. None of the patients who tested positive had been identified to have been treated with antifungals prior to T2Candida testing. In addition, antifungal therapy was discontinued for 100% of the patients who tested negative with T2Candida. Finally, data were presented at the Infectious Disease Society of America annual meeting, IDWeek, demonstrating that T2Candida is more sensitive and more rapid than blood culture for the identification of Candida. This study, the DIRECT2 study, also showed that T2Candida is superior to blood culture when detecting patients with proven infection but are receiving antifungal therapy due to the corresponding suppression of growth in the blood culture system. T2Candida is uninhibited by antifungal therapy; thus, providing a sensitivity of 94.5% compared to blood culture, which was 49.3% sensitive in the study.

We continue to see the clinical evidence of the benefits of the T2Candida test grow. Three recent, peer-reviewed studies further demonstrate the benefit of the T2Candida test. These studies present results of the high clinical sensitivity of T2Candida and that time to appropriate therapy may be greatly reduced with T2Candida. Additionally, the studies show that the use of T2Candida may correspond to significant reductions in certain types of Candida infections.

Study 1:

The DIRECT2 study, published in *Clinical Infectious Diseases*, was a multi-center study involving 14 sites and evaluated the performance of T2Candida and blood culture in N=152 candidemic patients. The T2Candida Panel detected 89% of infections across this patient population, validating the 91.1% clinical sensitivity reported from the FDA pivotal study for the T2Candida in a much larger patient population. Additionally, the T2Candida Panel detected almost twice as many confirmed infections as blood culture in patients receiving antifungal therapy. This indicates that the T2Candida Panel is a more effective diagnostic tool for patients treated with pre-emptive or empiric antifungal therapy. Consistent with other studies, the time savings afforded by T2Candida was significant. The median time to detection of *Candida* by diagnostic blood cultures and subsequent species identification was 3.4 days. In comparison, the T2Candida Panel provides diagnostic results in an average time of 4.4 hours. The authors noted that the T2Candida Panel "ushers in a new era in which rapid molecular testing for invasive candidiasis will serve as an adjunct to microbiologic cultures."

Study 2:

The STAMP study, published in the *Journal of Clinical Microbiology*, compared blood culture to the T2Candida Panel for monitoring the clearance of an infection when a patient is being treated with antifungal drugs. The study demonstrated that the T2Candida Panel can detect the ongoing presence of a *Candida* infection while blood culture often yields false negative test results because the administration of antifungal drugs can impede the growth of cells that blood culture requires to detect an infection. These observations are consistent with the DIRECT2 study. The authors concluded that the T2Candida Panel can be an effective tool for reliably identifying patients that have cleared an infection, which can reduce the unnecessary and expensive antifungal therapy. The STAMP study evaluated running multiple diagnostic tests for patients with confirmed *Candida* infections who were receiving antifungal drugs. The study demonstrated that the T2Candida Panel outperforms blood culture for monitoring the clearance of *Candida* infections.

- The T2Candida Panel was positive in 23 patient samples, compared to only 7 for blood culture in cases of true infection.
- The T2Candida Panel identified every infection that was detected by blood culture and provided actionable results 3 days earlier than blood culture.
- The T2Candida Panel detected a Candida infection that blood culture missed in one patient during the study.
- The T2Candida Panel results were a better indicator of disease clearance than blood culture, as two consecutive T2Candida negative results indicated that the patient no longer had an active infection in the blood that required aggressive management.
- STAMP study data suggest that serial testing of patients with the T2Candida Panel may enable more timely management of infections, de-escalation of therapy, better source control and overall reduced costs of care.

Study 3:

Another study published in *The Journal of Antimicrobial Stewardship* entitled "T2 Magnetic Resonance Assay Improves Timely Management of Candidemia" compared the management of candidemic patients before and after the implementation of the T2Candida Panel and was designed to evaluate time to appropriate therapy. Patients tested with the T2MR platform were treated in a median of 5 hours, a more than 8-fold reduction as compared to that based on blood culture, which delayed appropriate therapy by a median of 44 hours. This speed advantage demonstrates that the T2MR platform may be a valuable clinical tool to aid antifungal stewardship's goal to deliver timely antifungal therapy for infected patients. In addition to speed, the use of the T2MR platform provided increased identification of *Candida* infections. Consistent with the performance of blood culture and T2MR published in other studies, the *Candida* species was definitively identified in 93% of patients after implementation of T2MR and in only 57% of patients prior to implementation of T2MR. Prior to implementation of the T2Candida Panel, the only diagnostic tests used at Henry Ford Health System were blood culture and beta-D-glucan (BDG). The authors also identified an additional clinically relevant improvement in patient outcomes after the implementation of T2MR: a significant reduction of *Candida* ocular involvement from 30% to 12% was observed. The authors point out this could be associated with improved sensitivity of T2MR or due to improved timeliness of patient management by T2MR. Although the study was not adequately powered to evaluate reduction in patient mortality rates, the authors note that appropriately treating patients within 24 hours of the onset of disease is proven to reduce mortality rates from 41% to below 16%. T2MR is the only diagnostic method presented in this study with the speed and accuracy necessary to enable therapeutic decisions that achieve this reduction in mortality.

Due to the high mortality rate associated with *Candida* infections, physicians often will place patients on antifungal drugs while they await blood culture diagnostic results which generally take at least five days to generate a negative test result. Antifungal drugs are toxic and may result in side effects and can cost over $50 per day. Our T2Candida Panel's speed to result coupled with its superior sensitivity as compared to blood culture may help reduce the overuse of ineffective, or even unnecessary, antimicrobial therapy which may reduce side effects for patients, lower hospital costs and potentially counteract the growing resistance to antifungal therapy. The administration of inappropriate therapy is a driving force behind the spread of antimicrobial-resistant pathogens, which the United States Centers for Disease Control and Prevention, or the CDC, recently called "one of our most serious health threats."

**Our Strategy**

T2MR enables rapid and sensitive direct detection of a range of targets, and we believe it can be used in a variety of diagnostic applications that will improve patient outcomes and reduce healthcare costs. Our objective is to establish T2MR as a standard of care for clinical diagnostics. To achieve this objective, our strategy is to:

- ***Drive Commercial Adoption of Our Sepsis Products by Demonstrating Their Value to Physicians, Laboratory Directors and Hospitals***. We expect our sepsis products to meaningfully improve patient outcomes while reducing costs to hospitals. We have established a targeted, direct sales force in the United States and have partnered with distributors internationally, all of whom are initially focused on educating physicians and demonstrating our clinical and economic value proposition to hospitals that have the highest populations of at-risk critical care and immunocompromised patients. We believe a sustained focus on these hospitals will drive adoption of the T2Dx, T2Candida, our product candidate, T2Bacteria, and future T2MR-based diagnostics. As a part of this effort, we will continue to work with thought leaders, conduct clinical and health economic studies and seek publication and presentation of these studies.

- ***Establish a Recurring, Consumables-Based Business Model.*** We are pursuing a consumables-based business model for our products by securing placements of the T2Dx at hospitals and driving utilization of our diagnostic panels starting with T2Candida. We believe this strategy will foster a sustainable and predictable business model with recurring revenue streams.
- ***Broaden Our Addressable Markets in Infectious Disease.*** Our product development pipeline includes additional diagnostic panels that provide near-term and complementary market expansion opportunities. Our next sepsis product candidate in the United States, T2Bacteria, will focus on bacterial infections, will run on the T2Dx and is expected to address the same high-risk patients as T2Candida, while also expanding our reach to a new patient population at increased risk for bacterial sepsis infections. We will also expand our panels through partnerships similar to our agreement with Allergan, in which Allergan agreed to cover a portion of the costs of our development of certain additional products, including antibiotic resistance tests. We also are utilizing T2MR to address the challenges of providing rapid and sensitive diagnosis of Lyme disease and expect to initiate a T2Lyme clinical trial in 2018. In early 2017 we initiated a multi-site clinical trial for T2Bacteria, in July 2017 received authorization to affix a CE Mark which clears the product for use in Europe and other countries that accept the CE mark and on September 8, 2017 the Company filed a 510(k) premarket submission for the T2Bacteria Panel with the FDA. We have launched T2Bacteria commercially in Europe and other countries that accept the CE mark and will commercialize T2Bacteria and these product candidates in the US and other countries after obtaining appropriate marketing clearance or regulatory clearance.
- ***Broaden Our Addressable Markets Beyond Infectious Disease.*** We intend to expand our product offerings by applying T2MR to new applications beyond sepsis and Lyme disease. We plan to conduct internal development and to work with thought leaders, physicians, clinical researchers and business development partners to pursue new applications for T2MR. We believe the benefits of our proprietary technology, including the ability to rapidly and directly detect a broad range of targets, in a wide variety of sample types, will have potential applications within and outside of the in vitro diagnostics market, including environmental, food safety, industrial and veterinary applications.
- ***Drive International Expansion.*** We are commercializing T2Candida, T2Bacteria and the T2Dx internationally through distributors that target large hospitals in their respective markets. We intend to continue to expand in international markets through similar distribution channels. We have received CE marking for T2Candida, T2Bacteria and the T2Dx.

**Our Technology Platform**

***T2 Magnetic Resonance Technology Overview***

We have built an innovative and proprietary technology platform that offers a rapid, sensitive and simple alternative to existing diagnostic methodologies. T2MR is a miniaturized, magnetic resonance-based approach that measures how water molecules react in the presence of magnetic fields. Our proprietary platform is capable of detecting a variety of targets, including:

- molecular targets, such as DNA;
- immunodiagnostics targets, such as proteins; and
- a broad range of hemostasis measurements.

For molecular and immunodiagnostics targets, T2MR utilizes advances in the field of magnetic resonance by deploying particles with magnetic properties that enhance the magnetic resonance signals of specific targets. When particles coated with target-specific binding agents are added to a sample containing the target, the particles bind to and cluster around the target. This clustering changes the microscopic environment of water in that sample, which in turn alters the magnetic resonance signal, or the T2 relaxation signal that we measure, indicating the presence of the target.

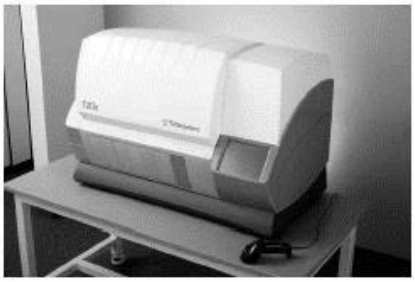
For hemostasis measurements, particles are not required because T2MR is highly sensitive to changes in viscosity in a blood sample, such as clot formation, stabilization or dissipation, which changes the T2 relaxation signal. This enables the rapid identification of clinically relevant hemostasis changes.

We also believe T2MR is the first technology that can rapidly and accurately detect the presence of molecular targets within samples without the need for time- and labor-intensive purification or extraction of target molecules from the sample, such as that required by traditional polymerase chain reaction, or PCR, where 90% or more of the target can be lost. We can eliminate these steps because the T2 relaxation signal is not compromised or disrupted by the sample background, even the highly complex sample background that is present after a target amplification process, such as thermocycling. This enables T2MR's low limit of detection, such as 1 CFU/mL, compared to the 100 to 1,000 CFU/mL typically required for PCR-based methods. Over 100 studies published in peer-reviewed journals have featured T2MR in a breadth of applications, including the direct detection and measurement of targets in various sample types, such as whole blood, plasma, serum, saliva, sputum and urine. We believe our T2MR technology will have potential applications within and outside of the *in vitro* diagnostics market, including environmental, food safety, industrial and veterinary applications.

***Our Instruments***

Utilizing T2MR, we have developed and received FDA marketing clearance for the T2Dx, a bench-top instrument for detecting pathogens associated with sepsis and Lyme disease, as well as other applications, and we have developed the T2Plex Instrument, or the T2Plex, a compact, fully integrated instrument for hemostasis applications.

*T2Dx*



The T2Dx is an easy-to-use, bench-top instrument that is capable of running a broad range of diagnostic tests and is fully automated from patient sample input to result, eliminating the need for manual work flow steps such as pipetting that can introduce risks of cross-contamination. To perform a diagnostic test, the patient sample tube is snapped onto our disposable test cartridge, which is pre-loaded with all necessary reagents. The cartridge is then inserted into the T2Dx, which automatically processes the sample and then delivers a diagnostic test result.

The initial panels designed to run on the T2Dx are T2Candida and T2Bacteria, which are focused on identifying life-threatening pathogens associated with sepsis. In 2014 we received FDA marketing clearance for the T2Dx and T2Candida. In early 2017 we initiated a multi-site clinical trial for T2Bacteria, in July 2017 received authorization to affix a CE Mark and on September 8, 2017 the Company filed a 510(k) premarket submission for the T2Bacteria Panel with the FDA.

**Sepsis**

***Overview***

Sepsis is an illness in which the body has a severe, inflammatory response to a bacterial or fungal infection. It is a life-threatening condition to which individuals with weakened immune systems or chronic illnesses are highly susceptible. Sepsis can lead to shock and organ failure, and is a leading cause of death in the United States with a mortality rate of approximately 30%, almost double the mortality rate of acute myocardial infarction, or heart attack. One out of every two hospital deaths in the United States is attributable to sepsis.

In 2016, the U.S. Department of Health and Human Services reported that sepsis is the most expensive hospital-treated condition in the United States, with an economic burden to hospitals exceeding $23 billion annually, almost double that of acute myocardial infarction. New data on the number of sepsis cases in the United States published by the U.S. Department of Health and Human Services in 2017 indicate that the economic burden now exceeds $27 billion. The high cost of treating sepsis is primarily driven by the extended hospitalization of patients. We believe there are many effective, targeted therapeutic choices that could reduce overall hospitalization costs if applied earlier, but clinicians need to more rapidly identify the specific sepsis-causing pathogens in order to make more informed, targeted treatment decisions. Today, the diagnostic standard to identify these pathogens is blood culture-based, despite typically requiring one to six or more days to generate species-specific results.

The following table reflects key statistics from the 2016 U.S. Department of Health and Human Services study regarding the five most expensive hospital-treated conditions:

| Rank | Condition | U.S. hospital costs (in billions) | Percentage of total inpatient costs |
|---|---|---|---|
| 1 | Sepsis | $ 23.6 | 6.2% |
| 2 | Osteoarthritis | 16.5 | 4.3 |
| 3 | Liveborn | 13.3 | 3.5 |
| 4 | Complication of device, implant or graft | 12.4 | 3.3 |
| 5 | Acute myocardial infarction (heart attack) | 12.0 | 3.2 |

Over 1.6 million individuals are diagnosed with sepsis each year, 1.35 million of whom are at high risk for infection due to their suppressed immune system or their presence in critical care units. Virtually all of these patients are rapidly treated with broad-spectrum antibiotic drugs because there is no diagnostic manner for determining the type of infection. Of these 1.35 million patients with sepsis and at high risk for

infection, approximately 40% do not respond to broad-spectrum antibiotic treatment. Of these patients that are non-responsive, approximately 25% of them have a *Candida* infection, with the remaining patients having a bacterial infection. Broad-spectrum antibiotics do not treat these *Candida* and bacterial infections; therefore more targeted drugs are required.

We estimate that approximately 15 million patients are tested for bloodstream infections in the United States annually. Of these, approximately 6.75 million are at high risk for a *Candida* infection and an additional two million, or approximately 8.75 million, in total are at high risk for a bacterial infection. We believe that our sepsis products have the potential to enable clinicians to make earlier therapeutic decisions that can reduce the mortality rate for sepsis by over 50% and save the hospitals an estimated $12 billion annually by testing all high risk patients with T2Candida and T2Bacteria.

Each year, over 18 million cases of sepsis are diagnosed outside of the United States, with estimated mortalities exceeding five million patients, making sepsis a leading cause of death worldwide.

***Limitations of Traditional In Vitro Diagnostics for Sepsis***

The current standard for identifying bloodstream infections that cause sepsis requires a series of lengthy and labor-intensive analyses that begin with blood culture. Completing a blood culture requires a large volume of a patient's blood, typically 20 mLs or more, which is obtained in two 10 mL draws and placed into two blood culture bottles containing nutrients formulated to grow fungi and bacteria. Before blood culture indicates if a patient is infected, pathogens typically must reach a concentration of 1,000,000 to 100,000,000 CFU/mL. This growth process typically takes one to six or more days because the pathogen's initial concentration in the blood specimen is often less than 10 CFU/mL. A negative test result always requires a minimum of five days. A positive blood culture typically means that some pathogen is present, but additional steps must be performed to identify the specific pathogen in order to provide targeted therapy. These additional steps, which typically must be performed by a highly trained technician, may involve any of (i) a staining procedure for inspection on a microscope slide, (ii) PCR amplification and (iii) mass spectrometry. These steps require a preceding positive blood culture specimen because they need a high concentration of cells generated by the blood culture process for analysis.

For most PCR-based diagnostics, nucleic acid extraction of target cells from the sample is performed to remove inhibitory substances that may interfere with the amplification reaction. While PCR amplifies the target signal, this loss of target cells impairs the ability to detect, resulting in typical limits of detection of 100 to 1,000 CFU/mL, which is insufficient for species-specific sepsis diagnostics.

Blood culture-based diagnostics have substantial limitations, including:

- **Time to Result Delays Targeted Treatment.** Blood culture-based diagnostics typically require a minimum of one and as many as six or more days to identify a pathogen species, and blood culture always requires at least five days to generate a negative test result.
- **Antimicrobial Therapy Can Cause False Negative Results.** Antimicrobial therapies may be administered to a patient prior to taking a blood sample. As a result, the therapeutic agent is contained in the blood sample and its ability to stop or slow the growth of pathogens can delay or completely inhibit the growth of the pathogen during the blood culture process leading to time delays in detection or false negative results.
- **Slow-Growing Pathogens Can Cause False Negative Results.** Some sepsis pathogens grow slowly or not at all and can require up to five or more days to reach sufficient concentrations to be detected by blood culture-based diagnostics. Blood culture procedures are typically stopped after five days and declared negative. Often, pathogens that grow too slowly are not detected by blood culture during this time frame, leading to a false negative diagnosis. For example, *C. glabrata*, one of the most lethal species of *Candida* due to its growing resistance to antifungal therapy, often requires more than five days of growth to reach a detectable concentration, and therefore is frequently undetected by blood culture.
- **Labor-Intensive Workflow Increases Costs and May Delay Targeted Treatment.** Blood culture is only the first step in identifying a pathogen that causes sepsis. After a blood culture is determined to be positive, highly trained technicians are required to perform multiple post-culture procedures on the blood culture specimen to identify the specific pathogen. These additional procedures can be expensive and time-consuming and may delay targeted treatment.

Given the typical one-to-six day time to result for blood culture-based diagnostics, the first therapy for a patient at risk of sepsis is often broad-spectrum antibiotics, which treat some but not all bacteria types and do not address fungal infections. Some physicians may use first-line, antifungal therapy for patients at very high risk for fungal infection, or use antifungal therapy if the patient is not responding to broad-spectrum antibiotics while they are still awaiting the blood culture-based result. This therapeutic approach may still not treat the growing number of patients infected with the antimicrobial-resistant species nor may it be the best choice, as the type of therapy is dependent on the specific pathogen causing the infection, which is unknown.

This inefficient therapeutic approach has resulted in unnecessary treatment of a significant number of high-risk patients with expensive and often toxic therapies that can worsen a patient's condition. Such treatments may extend for many days while clinicians await blood culture-based diagnostic results. The overuse of ineffective, or even unnecessary, antimicrobial therapy is also the driving force behind the spread of antimicrobial-resistant pathogens, which the CDC recently called "one of our most serious health threats." The CDC has specifically noted increasing incidence of *Candida* infections due to azole- and echinocandin-resistant strains and considers it a "serious" threat level. According to the CDC, at least two million people in the United States acquire serious infections each year that are resistant to one or more of the antimicrobial

therapies used to treat these patients. At least 23,000 of these people are estimated to die as a direct result of the resistant infections and many more may die from other conditions that are complicated by a resistant infection. Further, antimicrobial-resistant infections add considerable and avoidable costs to the already overburdened U.S. healthcare system, with the total economic cost estimated to be as high as $20 billion in excess of direct healthcare costs, with additional costs to society as high as $35 billion, due to lost productivity.

*Our Sepsis Solution*

We believe our T2 Magnetic Resonance technology, or T2MR, delivers a rapid, sensitive and simple diagnostic platform to enable sepsis applications that can identify specific sepsis pathogens directly from an unpurified blood sample in hours instead of days at a level of accuracy equal to or better than blood culture-based diagnostics. The T2Sepsis Solution refers to the approach of combining the standard of care for the management of sepsis patients, including the T2Dx Instrument, or the T2Dx, and T2Candida Panel, and the T2Bacteria Panel, which is commercially available in Europe and other countries that accept the CE mark and currently available for research use only in the United States. Currently, initial empiric therapy typically only covers approximately 60% of patients with sepsis infections. Of the remaining 40% of patients with sepsis infections, approximately 30% of the patients have a bacterial infection and 10% have Candida infections. Test panels included in the T2Sepsis Solution are designed to identify pathogens commonly not covered by initial empiric antimicrobial therapy, which we believe may enable physicians to effectively treat approximately 90% of the patients who are not on the right drugs.

We believe the T2Sepsis Solution provides a pathway for more rapid and targeted treatment of infections, potentially reducing the mortality rate by as much as 50% if a patient is treated within 12 hours of suspicion of infection and significantly reducing the cost burden of sepsis. Each year, approximately 500,000 patients in the United States die from sepsis. According to a study published by *Critical Care Medicine* in 2006, in sepsis patients with documented hypotension, administration of effective antimicrobial therapy within the first hour of detection was associated with a survival rate of 79.9% and, over the ensuing six hours, each hour of delay in initiation of treatment was associated with an average decrease in survival of 7.6%. According to such study, the survival rate for septic patients who remained untreated for greater than 36 hours was approximately 5%. The toll of sepsis on a patient's health can be severe: more than one-in-five patients die within two years as a consequence of sepsis. Sepsis is also the most prevalent and costly cause of hospital readmissions.

We believe the T2Sepsis Solution addresses a significant unmet need in *in vitro* diagnostics by providing:

- **Limits of Detection as Low as 1 CFU/mL.** T2MR is the only technology currently available that can enable identification of sepsis pathogens directly from a patient's blood sample at limits of detection as low as 1 CFU/mL.
- **Rapid and Specific Results in as Few as Three Hours.** T2MR is the only technology that can enable species-specific results for pathogens associated with sepsis, directly from a patient's blood sample, without the need for blood culture, to deliver an actionable result in three hours.
- **Accurate Results Even in the Presence of Antimicrobial Therapy.** T2MR is the only technology that can reliably detect pathogens associated with sepsis, including slow-growing pathogens, such as *C. glabrata*, directly from a patient's blood sample, even in the presence of an antimicrobial therapy.
- **Easy-to-Use Platform.** T2MR eliminates the need for sample purification or extraction of target pathogens, enabling sample- to-result instruments that can be operated on-site by hospital staff, without the need for highly skilled technicians.

Our first U.S. Food and Drug Administration, or FDA-cleared products, the T2Dx and T2Candida, focus on the most lethal form of common blood stream infections that cause sepsis, Candida, which has an average mortality rate of approximately 40%. According to a 2005 report published in Antimicrobial Agents and Chemotherapy, this high mortality rate can be reduced to 11% with the initiation of targeted therapy within 12 hours of presentation of symptoms. Currently, a typical patient with a Candida infection averages 40 days in the hospital, including nine days in intensive care, resulting in an average cost per hospital stay of over $130,000 per patient. In a study published in the American Journal of Respiratory and Critical Care Medicine in 2009, providing targeted antifungal therapy within 24 hours of the presentation of symptoms decreased the length of hospital stay by approximately ten days and decreased the average cost of care by approximately $30,000 per patient. In addition, many hospitals initiate antifungal drugs, such as Caspofungin or Micafungin, while waiting for blood culture-based diagnostic results. We estimate this practice costs approximately $500 per patient and is currently in use for over 40% of high-risk patients on average and for all high-risk patients in some hospitals. A negative result from T2Candida can provide timely data allowing physicians to avoid unnecessary antifungal treatment and potentially reduce the treatment cost further.

We believe that by identifying the specific species of *Candida*, physicians can administer the most effective therapy, significantly improving patient outcomes and reducing hospital costs. We further believe that the adoption of the T2Dx and T2Candida can decrease both the high mortality rate and excessive costs of *Candida* infections because these products can enable clinicians to make earlier and more informed decisions by providing positive test results to direct therapy and negative test results to reduce the use of antifungal drugs.

T2Bacteria, a multiplex diagnostic panel that detects the major bacterial pathogens associated with sepsis that are frequently not covered by first-line antibiotics, is CE-Marked and available commercially in Europe and other countries that accept the CE mark, as well as available as a research-use-only product in the United States. T2Bacteria runs on the T2Dx, and if cleared by the FDA for sale in the United States is expected to address the same approximately 6.75 million symptomatic high-risk patients as T2Candida while also expanding our reach to an additional two million people presenting with symptoms of infection in the emergency room setting. We believe that these factors make the United States market

opportunity for T2Bacteria over $1.0 billion, and that T2Bacteria has the potential to achieve similar performance capabilities and provide similar benefits as T2Candida.

To the extent that our T2Bacteria panel is performed on an outpatient basis, third-party payors may separately reimburse our customers using existing CPT codes. By way of example, Medicare payment for outpatient clinical laboratory services is the lesser of the amount billed, the local fee for a geographic area, or the national limit established by the Centers for Medicare & Medicaid Services under the Clinical Laboratory Fee Schedule, or CLFS, on an annual basis. For 2017, the national limit for the series of CPT codes used to bill the T2Bacteria panel is approximately $220. Effective January 1, 2018, CLFS rates will be based on weighted median private payor rates as required by the Protecting Access to Medicare Act of 2014. We believe that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our diagnostic products or additional pricing pressures.

***Clinical Utility***

*T2Candida*

*DIRECT Clinical Trial—Clinical Infectious Disease*

In 2013 and 2014, we conducted a pivotal clinical trial for our T2Dx Instrument and our T2Candida Panel, or the DIRECT trial. Our DIRECT trial consisted of two patient arms. The first arm, known as the Prospective Arm, consisted of 1,501 samples from patients with a possible infection. The second arm, known as the Contrived Arm, consisted of 300 samples, of which 250 patient specimens were labeled contrived because each contained a known quantity of *Candida* CFUs that were manually added to each sample, or spiked, at clinically relevant concentrations, while the remaining 50 patient specimens were specifically known not to contain *Candida*. The DIRECT trial was designed to evaluate the sensitivity and specificity of T2Candida on the T2Dx.

Sensitivity is the percent concordance, or the percentage of sample results that agree with a reference, or comparative, method for positive results. Specificity is the percent concordance to a reference method for negative results. If a sample does not agree with the result of a referenced method, it is considered discordant. In our clinical trial, the Prospective Arm was compared to blood culture and the Contrived Arm was compared to the known state, which means that it was in the known presence or absence of added *Candida* organisms.

The design of the DIRECT trial was reviewed by the FDA as part of pre-submission communications. The purpose of the DIRECT trial was to determine the clinical performance of T2Candida running on the T2Dx by identifying the following:

- clinical specificity of T2Candida results as compared to *Candida* negative blood culture results in specimens collected from patients in the Prospective Arm;
- clinical specificity of T2Candida results as compared to *Candida* negative samples collected from patients in the Contrived Arm;
- clinical sensitivity of T2Candida results as compared to the known *Candida*-positive specimens collected from patients in the Contrived Arm; and
- clinical sensitivity calculations of T2Candida results compared to the *Candida*-positive blood culture results in specimens collected from patients in the Prospective Arm.

50 known negative samples and 250 contrived samples (50 samples for each of the five *Candida* species included in the T2Candida Panel) were prepared and run in a blinded manner at the same clinical sites used for processing the prospective samples. The positive contrived samples were prepared by spiking clinical isolates into individual patient specimens at concentrations determined through publications and discussions with the FDA to be equivalent to the clinical state of patients who presented with symptoms of a *Candida* infection. 20% of the positive contrived samples were spiked at concentrations levels of less than 1 CFU/mL. The contrived samples were collected from patients referred for a diagnostic blood culture per routine standard of care — the same population of patients from whom prospective samples were collected. Unique isolates of the species were used for each patient sample, which means a total of 50 unique isolates were tested for each of the five species of *Candida* for a total of 250 unique isolates.

In addition to the pivotal clinical trial data that we submitted to the FDA, we also provided data from an analytical verification study to determine the limit of detection, or LoD, for each species identified by our T2Candida Panel. The LoD was defined as the lowest concentration of *Candida* that can be detected in 95% of at least 20 samples tested at a single concentration.

The T2Candida Panel reports three results, where species are grouped together according to their responsiveness to therapy. *Candida albicans* and/or *Candida tropicalis* are reported as a single result, *Candida parapsilosis* is a single result, and *Candida krusei* and/or *Candida glabrata* are reported as a single result. Specificity and sensitivity are calculated for each reported result.

There are five relevant species of *Candida*, each of which were analyzed in the DIRECT trial. Each are listed in abbreviated form in the tables below. These species are *Candida albicans*, *Candida tropicalis*, *Candida parapsilosis*, *Candida krusei*, and *Candida glabrata*. The typical naming convention for a species is to abbreviate by using the first letter of the first word and the full second word; for example, *Candida krusei* is

abbreviated as *C. krusei*. In the tables below, we also abbreviate each species name by the first letter of the second word; for example, *Candida albicans* and *Candida tropicalis* is A/T.

The following tables illustrate the results of the DIRECT trial. The primary sensitivity and specificity analysis is presented in Table A, followed by sub-analyses in Tables B and C. Additional data on the LoD and the time to results of T2Candida and the T2Dx are included in the remaining tables.

**Table A**
**T2Candida Performance Characteristics**

| | Overall Sensitivity | Overall Specificity |
|---|---|---|
| Number of Tests (%) | 234/257 (91.1%) | 5114/5146 (99.4%) |

**Table B**
**Overall Sensitivity and Specificity by Test**

| | | 95% Confidence Interval | |
|---|---|---|---|
| **Specificity:** | | | |
| A/T *(C. albicans/C. tropicalis )* | 1679/1697 (98.9%) | 98.3 - | 99.4% |
| P *(C. parapsilosis)* | 1736/1749 (99.3%) | 98.7 - | 99.6% |
| K/G *(C. krusei/C. glabrata)* | 1699/1700 (99.9%) | 99.7 - | 100.0% |
| Total: | 5114/5146 (99.4%) | 99.1 - | 99.6% |
| **Sensitivity:** | | | |
| A/T *(C. albicans/C. tropicalis)* | 96/104 (92.3%) | 85.4 - | 96.6% |
| P *(C. parapsilosis)* | 49/52 (94.2%) | 84.1 - | 98.8% |
| K/G *(C. krusei/C. glabrata)* | 89/101 (88.1%) | 80.2 - | 93.7% |
| Total: | 234/257 (91.1%) | 86.9 - | 94.2% |

**Table C**
**Study Arm Sensitivity and Specificity by Test**

| | | 95% Confidence Interval | |
|---|---|---|---|
| **Specificity (Prospective tests):** | | | |
| A/T *(C. albicans/C. tropicalis )* | 1479/1497 (98.8%) | 98.1 - | 99.3% |
| P *(C. parapsilosis)* | 1487/1499 (99.2%) | 98.6 - | 99.6% |
| K/G *(C. krusei/C. glabrata)* | 1499/1500 (99.9%) | 99.6 - | 100.0% |
| Total: | 4465/4496 (99.3%) | 99.0 - | 99.5% |
| **Sensitivity (Prospective tests):** | | | |
| A/T *(C. albicans/C. tropicalis)* | 2/4 (50.0%) | 6.8 - | 93.2% |
| P *(C. parapsilosis)* | 2/2 (100.0%) | 15.8 - | 100.0% |
| K/G *(C. krusei/C. glabrata)* | 1/1 (100.0%) | 2.5 - | 100.0% |
| Total: | 5/7 (71.4%) | 29.0 - | 96.3% |
| **Specificity (Contrived tests):** | | | |
| A/T *(C. albicans/C. tropicalis)* | 200/200 (100.0%) | 98.2 - | 100.0% |
| P *( C. parapsilosis)* | 249/250 (99.6%) | 97.8 - | 100.0% |
| K/G *(C. krusei/C. glabrata)* | 200/200 (100.0%) | 98.2 - | 100.0% |
| Total: | 649/650 (99.8%) | 99.1 - | 100.0% |
| **Sensitivity (Contrived tests):** | | | |
| A/T *(C. albicans/C. tropicalis)* | 94/100 (94.0%) | 87.4 - | 97.8% |
| P *(C. parapsilosis)* | 47/50 (94.0%) | 83.5 - | 98.7% |
| K/G *(C. krusei/C. glabrata)* | 88/100 (88.0%) | 80.0 - | 93.6% |
| Total: | 229/250 (91.6%) | 87.4 - | 94.7% |

**Table D**
**T2Candida Limit of Detection**

| Species | Final LoD CFU/mL |
|---|---|
| *C. albicans* | 2 |
| *C tropicalis* | 1 |
| *C. parapsilosis* | 3 |
| *C. glabrata* | 2 |
| *C. krusei* | 1 |

**Table E**
**Sensitivity Sub-Analysis: Sensitivity by Species Relative to LoD**

| | | ≥ LoD | | | < LoD | | |
|---|---|---|---|---|---|---|---|
| | LoD (CFU/ml) | Sensitivity | 95% Confidence Interval | | Sensitivity | 95% Confidence Interval | |
| *C. albicans* | 2 | 39/39 (100.0%) | 91.0 - | 100.0% | 9/11 (81.8%) | 48.2 - | 97.7% |
| *C. glabrata* | 2 | 35/37 (94.6%) | 81.8 - | 99.3% | 7/13 (53.8%) | 25.1 - | 80.8% |
| *C. krusei* | 1 | 40/40 (100.0%) | 91.2 - | 100.0% | 6/10 (60.0%) | 26.2 - | 87.8% |
| *C. parapsilosis* | 3 | 32/32 (100.0%) | 89.1 - | 100.0% | 15/18 (83.3%) | 58.6 - | 96.4% |
| *C. tropicalis* | 1 | 38/40 (95.0%) | 83.1 - | 99.4% | 8/10 (80.0%) | 44.4 - | 97.5% |
| Total: | | 184/188 (97.9%) | 94.6 - | 99.4% | 45/62 (72.6%) | 59.8 - | 83.1% |

**Table F**
**Sensitivity Sub-Analysis: Sensitivity by Titer Level**

| | <1 CFU/ml Sensitivity | 1 — 10 CFU/ml Sensitivity | 11 — 30 CFU/ml Sensitivity | 31 — 100 CFU/ml Sensitivity |
|---|---|---|---|---|
| *C. albicans* | 8/10 (80.0%) | 18/18 (100.0%) | 17/17 (100.0%) | 5/5 (100.0%) |
| *C. glabrata* | 5/10 (50.0%) | 16/18 (88.9%) | 16/17 (94.1%) | 5/5 (100.0%) |
| *C. krusei* | 6/10 (60.0%) | 18/18 (100.0%) | 17/17 (100.0%) | 5/5 (100.0%) |
| *C. parapsilosis* | 8/10 (80.0%) | 17/18 (94.4%) | 17/17 (100.0%) | 5/5 (100.0%) |
| *C. tropicalis* | 8/10 (80.0%) | 16/18 (88.9%) | 17/17 (100.0%) | 5/5 (100.0%) |
| Total: | 35/50 (70.0%) | 85/90 (94.4%) | 84/85 (98.8%) | 25/25 (100.0%) |

**Table G**
**Sensitivity Sub-Analysis: Sensitivity by Species Relative to Clinically Relevant Concentrations**

| Species | Clinically Relevant Concentration | Sensitivity ≤ Relevant CFU | Sensitivity ≥ Relevant CFU |
|---|---|---|---|
| *C. tropicalis* | 1-10 CFU/mL | 80% | 95% |
| *C. krusei* | 11-30 CFU/mL | 85.7% | 100% |
| *C. glabrata* | 11-30 CFU/mL | 75% | 96% |
| *C. albicans* | 1-10 CFU/mL | 80% | 100% |
| *C. parapsilosis* | 11-30 CFU/mL | 89.3% | 100% |
| Total | | 82.7% | 98% |

**Table H**
**Time to species identification or negative result for T2MR and Blood Culture**

| | Blood Culture | T2Dx |
|---|---|---|
| Time to Results (hours) | | |
| Mean ± SD (N) | 126.5 ± 27.3 (1470) | 4.2 ± 0.9 (1470) |
| Median | 121.0 | 4.1 |
| (Min, Max) | (12.4, 247.2) | (3.0, 7.5) |
| Time to Positive Results(1),(2) (hours) | | |
| Mean ± SD (N) | 43.6 ± 11.1 (4) | 4.4 ± 1.0 (4) |
| Median | 46.1 | 4.6 |
| (Min, Max) | (28.1, 54.1) | (3.2, 5.4) |
| Time to Negative Results(1),(2) (hours) | | |
| Mean ± SD (N) | 126.7 ± 27.0 (1466) | 4.2 ± 0.9 (1466) |
| Median | 121.1 | 4.1 |
| (Min, Max) | (12.4, 247.2) | (3.0, 7.5) |

(1) Includes samples that are 100% concordant for both methods (i.e. does not include discordant results). We do not include discordant results because a comparison of the duration of time to positive result requires that both the blood culture result and the T2Candida result be positive for a given specimen. Similarly, a comparison of the duration of time to negative result requires that both the blood culture result and the T2Candida result be negative for a given specimen. We therefore would exclude any sample with a discordant result where blood culture yields one result and T2Candida yields the opposite result.

(2) Refers to time to species identification or final negative result.

Results from the study were published in *Clinical Infectious Disease* in 2015 in an article entitled: "T2 Magnetic Resonance Assay for the Rapid Diagnosis of Candidemia in Whole Blood: A Clinical Trial." The study findings include:

- the overall sensitivity (Prospective and Contrived Arm combined) of T2Candida was 91.1%;
- the average specificity of the three test results for the Prospective and Contrived Arms combined was 99.4% (see Table A) with the specificity by test result ranging from 98.9% to 99.9% (see Table B);
- in the Contrived Arm of the study, the average specificity was 99.8%, with the specificity by test result ranging from 99.6% to 100% (see Table C);
- in the Prospective Arm of the study, the average specificity was 99.3%, with the specificity by test result ranging from 98.8% to 99.9% (see Table C);
- in the Contrived Arm of the study, the average sensitivity was 91.6%, with the sensitivity by test result ranging from 88.0% to 94.0% (see Table C); and
- in the Prospective Arm of the study, the average sensitivity was 71.4% (see Table C).

In this study, the following observations were reported:

- within the Prospective Arm, T2Candida accurately detected a rare co-infection in one study patient with *C. albicans* and *C. parapsilosis* in their bloodstream;
- T2Candida detected at least one infection that was not identified by blood culture, which was determined to be a *Candida* infection seven days after the T2Candida result was obtained. This case is considered a discordant result for the purposes of the FDA filing because of the disagreement between T2Candida and the blood culture-based results, despite the accurate identification by T2Candida. Along with ten other patients with clinical symptoms or microbiological evidence of infection, the study findings indicate that the true sensitivity and specificity of T2Candida may be higher than the reported values;
- the LoD of T2Candida was demonstrated to be 1 to 3 CFU/mL depending upon the species of *Candida* (see Table D). In the Contrived Arm of the study, T2Candida positively detected 97.9% of the samples spiked at and above the LoD while also detecting 72.6% of all samples spiked at concentration levels below the LoD (see Table E);
- in the Contrived Arm of the study, T2Candida detected 97% of cases at or above 1 CFU/mL and 70% of cases below 1 CFU/mL (see Table F);
- in the Contrived Arm of the study, T2Candida detected 98% of cases at or above clinically relevant concentrations of *Candida* , ranging from 95% to 100% detection depending on the *Candida* species (see Table G);
- T2Candida demonstrated an average time to positive result of 4.4 hours compared to blood culture average time to result of 129 hours;

- T2Candida demonstrated an average time to negative result of 4.2 hours compared to blood culture average time to result of >120 hours; and
- T2Candida has a negative predictive value of 99.8% in a standard population. Negative predictive value is the probability that subjects with a negative result truly do not have the disease.

The authors of the study made the following conclusions based on the study results:

- Because mortality due to invasive candidiasis has remained high and unchanged for the past two decades and early initiation of appropriate antifungal therapy has been reported to reduce mortality by at least two-thirds, the rapid and accurate diagnostic capability offered by this novel technology has the potential to change the management and prognosis of the disease.
- The ability to rapidly and accurately exclude the possibility of candidemia can have significant implications in clinical practice, by decreasing the number of patients who need to be on empiric antifungal therapy, and thus decreasing the incidence of resistant strains, the potential of side effects of antifungal treatment, and substantial healthcare costs.
- A key advantage of T2MR over other biosensors is that it does not require culture and sample purification or preparation.

*Massachusetts General Hospital Study — Science Translational Medicine*

We co-authored a study with investigators from Massachusetts General Hospital, or MGH, to evaluate the sensitivity and specificity of T2MR to detect *Candida* compared to blood culture-based diagnostics. Results from the study were published in an article entitled "T2 Magnetic Resonance Enables Nanoparticle-Mediated Rapid Detection of Candidemia in Whole Blood" in *Science Translational Medicine* in 2013. In this study:

- T2MR was tested across 320 contrived whole blood samples, each containing one of the five clinically relevant species of *Candida*, and was able to detect each of the species at a LoD ranging from 1 to 3 CFU/mL.
- T2MR was tested across 24 whole blood specimens from patients exhibiting symptoms of sepsis, with eight *Candida* positive, eight bacteria positive and eight negative samples. Results showed 100% sensitivity and 100% specificity of T2MR when compared with blood culture results for identification of *Candida*.
- In patients with *Candida* treated with antifungal therapy, T2MR detected the presence of *Candida* in patient samples drawn up to four days after antifungal administration, while blood culture failed to identify the infection upon administration of antifungal therapy.

*University of Houston Study — Diagnostic Microbiology and Infectious Disease*

We sponsored an independent study at the University of Houston to directly compare the sensitivity and time to result of T2Candida running on the T2Dx and blood culture-based diagnostics. In this study, contrived blood samples were split between T2Candida using the T2Dx and standard blood culture. The study showed improved performance of T2Candida over blood culture in terms of speed and sensitivity. The following findings were published in an article entitled "Comparison of the T2Dx Instrument with T2Candida Diagnostic Panel and Automated Blood Culture in the Detection of *Candida* Species Using Seeded Blood Samples" in *Diagnostic Microbiology and Infectious Disease* in 2013:

- T2Candida detected all of the samples of *C. glabrata* at concentrations of 2.8 CFU/mL, while blood culture was not able to detect *C. glabrata* in any of the samples, even at a higher concentration of 11 CFU/mL and with the standard five-day run time.
- T2Candida detected all of the samples for all of the species of *Candida* at concentration levels of 3.1 to 11 CFU/mL.
- The average time to species identification was approximately three hours for T2Candida, as opposed to over 60 hours for blood culture.

The following table summarizes the results of our University of Houston study. The five relevant species of *Candida* were analyzed in the University of Houston study.

**Contrived blood samples at concentrations between 3.1 — 11 CFU/mL**

| | **Blood Culture (n=20 per species)** | | | **T2Candida (n=13-20 per species)** | | |
|---|---|---|---|---|---|---|
| Average time to positive result | 63.23 ± 30.27 hours | | | 3 hours | | |
| | *C. albicans* | = | 100% | *C. albicans* | = | 100% |
| | *C. tropicalis* | = | 100% | *C. tropicalis* | = | 100% |
| Detection rate | *C. parapsilosis* | = | 100% | *C. parapsilosis* | = | 100% |
| | *C. glabrata* | = | 0% | *C. glabrata* | = | 100% |
| | *C. krusei* | = | 100% | *C. krusei* | = | 100% |
| Sensitivity | | | | 100% | | |
| Specificity | | | | 98% | | |

*Clinical Data Review of T2MR and T2Candida—Future Microbiology*

Dr. Michael Pfaller (T2 Biosystems Chief Medical Officer), Donna Wolk, PhD (Geisinger Health System), and Tom Lowery, PhD (T2 Biosystems Chief Scientific Officer) collaborated to perform a meta-analysis of T2MR and T2Candida data that was published in *Future Microbiology* in 2015 with the title *T2MR and T2Candida: novel technology for the rapid diagnosis of candidemia and invasive candidiasis.* The article had the following overall summary statements and conclusions:

- There is an urgent need to rapidly and accurately detect and identify fungal pathogens. Current culture-based methodologies are too slow and, with some organisms like *C. glabrata*, may fail altogether due to the insensitivity of some blood culture systems to detect this slow-growing species.
- The development and FDA approval of the T2Candida Panel represents the advent of a new class of infectious disease diagnostics that enable rapid, direct detection and identification of pathogens in a culture-independent manner. The new panel will reduce the time to detection and species identification for common *Candida* species.
- As of the date of publication of the article, the T2Candida Panel had identified over 31 cases of candidemia and 12 cases of candidiasis. In the latter 12 cases, blood culture was unable to detect any of those proven infections. There were an additional ten patients with probable or suspected invasive candidiasis, but patient record review was not available to include these cases. More specifically, across all studies to date, T2Candida had successfully detected 43 of 45 patients with confirmed candidemia (31/33) or candidiasis (12/12). When including patients with probable candidiasis, T2Candida detected 10 of 10 patients, totaling 53 of 55 cases detected for candidemia or candidiasis. In this aggregate population, blood culture only detected 33 of 55 patients. Table 7 from the article summarizes the data showing increases in sensitivity for T2Candida vs. blood culture.

**Table 7. Summary of T2Candida detection of invasive candidiasis and candidemia.**

| Disease detected | T2Candida | Blood culture | Total *Candida* infections |
|---|---|---|---|
| Candidemia | 31 | 33 | 33 |
| Invasive candidiasis | 12 | 0 | 12 |
| Probable or suspected invasive candidiasis | 10 | 0 | 10 |
| Total cases | 53 | 33 | 55 |
| Sensitivity | 96.4% (53/55) | 60% (33/55) | |

- Across all studies to date, T2Candida had an overall specificity of greater than 99.4% from more than 1,560 patients.
- Application of the T2Candida Panel facilitates the diagnosis of candidemia and other forms of invasive candidiasis and promises to have major clinical impact resulting from the diagnosis of previously unrecognized, deep-seated candidiasis as well as from the 'real-time' (hours) detection of candidemia. The earlier species-level diagnosis provided by the T2Candida Panel will allow targeted pre-emptive antifungal therapy which should result in a decrease in *Candida* -associated morbidity, mortality, and excess length of stay in the hospital and at the same time reduce unnecessary empiric antifungal therapy. The T2Candida Panel provides breakthrough performance in the detection and identification of *Candida* direct from patient samples and may significantly impact patient mortality and hospital costs.

*Customer Presentations*

Over the past 12 to 18 months, customers have begun to report on their experiences with the T2Candida Panel at conferences and in publications. Below is a summary of some those reports.

- Investigators at the Henry Ford Health System reported data that demonstrated that after the implementation of T2Candida in their hospital system, the hospital system projected that it may save an estimated $2.3M annually, reduced median ICU length of stay by seven days per patient (p=0.009), and reduced total length of stay by four days per patient (p=0.164). Additionally, 75% of negative patients had antifungals discontinued or deescalated.
- Investigators at the Lee Health System reported that after the implementation of T2Candida, they have experienced a reduction in the average length of stay per patient by 7 days, unnecessary antifungal therapy was avoided in 41% of patients, and unnecessary antifungal therapy was discontinued after 1 dose in another 15% of patients, and the average net antifungal savings was $195 for every patient tested with T2Candida.
- Investigators at Riverside Community Hospital reported that implementation of T2Candida led to therapy being discontinued for 100% of patients who tested negative, and for patients who tested positive and had not been on antifungals prior to testing, 83% of patients who tested positive received appropriate therapy within six hours of blood drawing and 100% within nine hours of blood draw.

- Investigators at Huntsville Hospital, showed that use of the T2Candida panel resulted in reduction in duration of therapy and time to de-escalation in negative patients. This yielded net pharmacy savings of approximately $280 per patient tested. T2Candida also detected 56% more positive patients than blood culture.
- Investigators at the University Di Roma reported that T2Candida detected invasive candidiasis that were not identified by blood culture. T2Candida identified three cases of *C. albicans* and one case of *C. glabrata* that were proven accurate with additional *in vitro* diagnostic testing and diagnostic imaging.

**Candida Auris**

In September 2017, we entered into an agreement with the CDC, pursuant to which the CDC agreed to utilize T2Dx in its laboratory for potentially testing and monitoring the emergence and outbreaks of the superbug *Candida auris*, which we expect to occur in hospitals around the United States.

*Candida auris* is a multi-drug resistant pathogen recognized by the CDC as a serious global health threat because it can be resistant to all three major classes of antifungal drugs and is difficult to identify. The CDC has also reported that more than one-in-three patients with *Candida auris* infections have died. Unlike most other species of *Candida*, *Candida auris* can spread quickly in a hospital making rapid identification and hospital environment surveillance a critical component of containing these outbreaks. Existing laboratory methods that detect *Candida auris*, including blood culture, suffer from prolonged detection times and low accuracy, which exacerbates the challenge in the fight to contain the superbug. Recently, reported cases have surged internationally, and the CDC has reported a significant increase in infected patients in the United States. According to the European Centre for Disease Prevention and Control, hospital outbreaks have occurred in the United Kingdom and Spain. Because *Candida auris* can be resistant to most treatment options and can spread so quickly, these hospital outbreaks have been difficult to contain by even the most enhanced control measures.

The goals of the CDC collaboration are to use the T2Dx Instrument to (i) validate the detection of *Candida auris* from patient skin samples and hospital environmental samples, (ii) validate a process for surveillance of *Candida auris* in healthcare facilities from skin and environmental samples, and (iii) assist state and local public health labs in combating the outbreak.

**T2Bacteria**

*T2Bacteria Panel Pivotal Clinical Study Information*

On August 4, 2017, T2 Biosystems, Inc. completed a pivotal clinical study of the T2Bacteria® Panel, run on the T2Dx® Instrument (T2Dx), which is a qualitative T2 Magnetic Resonance (T2MR®) assay designed for the direct detection of bacterial species in EDTA human whole blood specimens from patients with suspected bacteremia. The T2Bacteria Panel is designed to identify species of bacteria directly from human whole blood specimens: *Enterococcus faecium, Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa,* and *Staphylococcus aureus.* Outside of the United States, the CE marked T2Bacteria panel identifies all 5 of these species along with a 6th species, *Acinetobacter Baumannii*

The performance characteristics of the T2Bacteria Panel were evaluated through a series of analytical studies as well as a multi-center clinical study. The clinical study evaluated the performance of the T2Bacteria Panel in comparison to the current standard of care, blood culture. All of the data generated in the analytical studies and the clinical study were submitted to the United States Food and Drug Administration, or FDA, in a 510(k) premarket notification on September 8, 2017.

The clinical study consisted of two arms, a prospective arm and a seeded arm. In the prospective arm, a total of 1,427 subjects were tested at eleven geographically dispersed and demographically diverse sites in the United States. In the seeded arm, 300 specimens of known bacterial composition were evaluated at three sites. Seeded specimens were prepared by spiking whole blood with multiple strains of the bacterial species detected by the T2Bacteria Panel at defined concentrations (CFU/mL). Fifty negative blood samples also were evaluated as part of the seeded arm of the study. In total, 1,777 (1,427 prospective specimens and 350 seeded and negative) clinical samples were tested to evaluate the clinical performance of the T2Bacteria Panel.

The study findings submitted to the FDA include:

- The overall sensitivity for the prospective and seeded arms combined was 95.8% (see Table I below);
  - In the seeded arm of the study, the average sensitivity was 96.8% (see Table K), with the sensitivity by bacterial target ranging from 90.9% to 100.0% (see Table L);
  - In the prospective arm of the study, the average sensitivity was 89.7% (see Table M), with the sensitivity by bacterial target ranging from 81.3%% to 100.0% (see Table N);

- The average specificity for the prospective and seeded arms combined was 98.1% (see Table I);
  - In the seeded arm of the study, the average specificity of the test was 99.0% (see Table K), with the specificity by bacterial target ranging from 97.3% to 100.0% (see Table L);
  - In the prospective arm of the study the average specificity of the test was 97.9% (see Table M), with the specificity by bacterial target ranging from 95.0% to 99.4% (see Table N);
- In the prospective arm of the study, results that were identified as positive by the T2Bacteria Panel but negative by blood culture were evaluated by looking at additional blood culture results obtained +/- 14 days of the paired T2 / blood culture draw. 36% of the T2 positive / blood culture negative results were found to be culture positive for the organism identified by the T2Bacteria Panel within the defined 14 day window (Table N).
- In the prospective arm of the study, four specimens that were identified as negative by the T2Bacteria Panel but positive by blood culture were evaluated by running a second archived blood sample. Two of the four samples generated positive results by the T2Bacteria Panel that were in agreement with blood culture, one for *S. aureus* and the other for *E.coli*.

**Table I: T2Bacteria Panel Overall Performance for Prospective and Seeded Arms**

| Sensitivity | 95% CI | Specificity | 95% CI |
|---|---|---|---|
| 95.4% (209 / 219) | 91.8%-97.5% | 97.9% (8,416/8,596) | 97.6%-98.2% |

**Table J: T2Bacteria Panel Combined Performance for Prospective and Seeded Arms**

| | Sensitivity (PPA) | | Specificity (NPA) | |
|---|---|---|---|---|
| Species | Sensitivity | 95% CI | Specificity | 95% CI |
| ***E. coli*** | 90.9% (30/33) | 76.4% - 96.9% | 95.4% (1637/1716) | 94.3% - 96.3% |
| ***E. faecium*** | 100.0% (41/41) | 91.4% - 100.0% | 99.5% (1717/1726) | 99.0% - 99.7% |
| ***K. pneumoniae*** | 100.0% (46/46) | 92.3% - 100.0% | 98.6% (1697/1721) | 97.9% - 99.1% |
| ***P. aeruginosa*** | 97.7% (43/44) | 88.2% - 99.6% | 97.7% (1682/1722) | 96.9% - 98.3% |
| ***S. aureus*** | 89.1% (49/55) | 78.2% - 94.9% | 98.4% (1683/1711) | 97.6% - 98.9% |

- PPA (sensitivity) calculated against samples with titer levels at or above limit of detection (LoD) in Seeded Arm and blood culture positives in Prospective Arm
- NPA (specificity) calculated from all samples (including below LoD and unspiked negative samples) as the total number of negative channels divided by total number of non-spiked channels in Seeded Arm and blood culture negatives in Prospective Arm.

**Table K: T2Bacteria Panel Seeded Sample Performance**

| Sensitivity | 95% CI | Specificity | 95% CI |
|---|---|---|---|
| 96.7% (174 / 180) | 92.9%-98.5% | 98.9% (1,483/1,500) | 98.2%-99.3% |

- PPA (sensitivity) calculated against samples with titer levels at or above limit of detection (LoD)

**Table L: T2Bacteria Panel Seeded Sample Performance**

| | Sensitivity (PPA) | | Specificity (NPA) | |
|---|---|---|---|---|
| Species | PPA | 95% CI | NPA | 95% CI |
| ***E. coli*** | 90.9% (20/22) | 72.2 - 97.5% | 97.3% (292/300) | 94.8 - 98.6% |
| ***E. faecium*** | 100% (40/40) | 91.2 - 100% | 100% (300/300) | 98.7 - 100% |
| ***K. pneumoniae*** | 100% (40/40) | 91.2 - 100% | 99.3% (298/300) | 97.6 - 99.8% |
| ***P. aeruginosa*** | 97.4% (38/39) | 86.8 - 99.5% | 97.7% (293/300) | 95.3 - 98.9% |
| ***S. aureus*** | 92.3% (36/39) | 79.7 - 97.3% | 100% (300/300) | 98.7 - 100% |

- PPA (sensitivity) calculated against samples with titer levels at or above limit of detection (LoD)

**Table M: T2Bacteria Panel Overall Performance for Prospective Arm**

| Sensitivity | 95% CI | Specificity | 95% CI |
|---|---|---|---|
| 89.7% (35/39) | 76.4%-95.9% | 97.7% (6,933/7,096) | 97.3%-98.0% |

**Table N: T2Bacteria Panel Performance as Compared to Blood Culture — Prospective Arm**

| | Sensitivity (PPA) | | Specificity (NPA) | |
|---|---|---|---|---|
| **Species** | **Sensitivity** | **95% CI** | **Specificity** | **95% CI** |
| ***E. coli*** | 90.9% (10/11) | 62.3 - 98.4% | 95.0% (1345/1416) | 93.7 - 96.0% |
| ***E. faecium*** | 100.0% (1/1) | 20.7 - 100% | 99.4% (1417/1426) | 98.8 - 99.7% |
| ***K. pneumoniae*** | 100.0% (6/6) | 61.0 - 100% | 98.5% (1399/1421) | 97.7 - 99.0% |
| ***P. aeruginosa*** | 100.0% (5/5) | 56.6 - 100% | 97.7% (1389/1422) | 96.8 - 98.3% |
| ***S. aureus*** | 81.3% (13/16) | 57.0 - 93.4% | 98.0% (1383/1411) | 97.1 - 98.6% |

**Table N: Percentage of Positive results with negative paired Blood Cultures that were Found to be Culture Positive +/- 14 Days of Paired T2/Blood Culture Draw**

| **Bacteria** | **Percentage of T2(+)/BC(-) results with other Positive Cultures*** |
|---|---|
| *E.coli* | 23/70 (33%) |
| *E. faecium* | 4/9 (44%) |
| *K. pneumoniae* | 8/21 (38%) |
| *P. aeruginosa* | 7/32 (22%) |
| *S. aureus* | 21/28 (75%) |
| ***Total*** | **63/173 (36%)** |

*Customer Presentations*

In 2017, two customers reported on their experiences with the T2Bacteria Panel. Below is a summary of those reports.

- Investigators at the Catholic University School of Medicine in Rome, Italy, presented interim data from a study in which T2Bacteria achieved 100% sensitivity and 97% specificity in analytical studies, and in clinical studies, it identified patients with infection in as fast as four hours, while blood culture took up to five days, inclusive of multiple cases where T2Bacteria identified patients missed by blood culture with proven infections.
- Investigators at Northwestern University in Chicago, Illinois, presented data demonstrating that the T2Bacteria Panel had 89% sensitivity for bacterial infections while blood culture only detected 68% of infections, and positive T2Bacteria Panel results for patients on antibiotic therapy correlated to more serious and poorly controlled infections.

**Lyme Disease**

We believe that T2MR can also address the significant unmet need associated with Lyme disease, a tick-borne illness that can cause prolonged neurological disease and musculoskeletal disease. For patients with Lyme disease, early diagnosis and appropriate treatment significantly reduces both the likelihood of developing neurological and musculoskeletal disorders, as well as the significant costs associated with treating these complications. Multiple diagnostic methods are used to test for Lyme disease today, which are labor-intensive, can take weeks to process, and are subject to high false negative rates due to their inability to detect the disease, making each method unreliable in the diagnosis of the condition. Because of these limitations, patients are frequently misdiagnosed or are delayed in the diagnosis of this disease.

According to the CDC, Lyme disease affects approximately 30,000 people in the U.S. each year, but the CDC also estimates that the actual number is closer to 360,000 due to under-reporting because of poor diagnostic methods. Approximately 3.4 million tests are run for Lyme disease each year, including serology testing, PCR techniques and blood culture, which has low sensitivity and takes approximately two to three weeks to provide results. Inadequate identification of Lyme disease may lead to antibiotic resistance, significant costs, and transmission of the disease through healthcare procedures such as blood transfusion. The misdiagnosis of Lyme disease has been reported to have an annual cost of more than $10,000 per patient in the United States, representing over $3 billion per year.

Our product candidate, T2Lyme is designed to identify the bacteria that cause Lyme disease directly from the patient's blood, without the need for blood culture which, for the bacteria associated with Lyme disease, can take several weeks. The test panel is expected to be run on the T2Dx Instrument, the same instrument currently used to run our T2Candida test panel and in the future, our T2Bacteria Panel product candidate. We anticipate the T2Lyme test panel to benefit from similar advantages provided by T2MR as the T2Candida Panel, including high sensitivity, high specificity, ease of use and rapid time to result. T2Lyme may provide accurate and timely diagnosis of Lyme disease and may prevent the evolution of the disease to its later stages with associated neurological and musculoskeletal diseases. We expect to initiate a T2Lyme clinical trial in 2018.

We expect that existing CPT codes will be used to facilitate reimbursement of our T2Lyme diagnostic panel.

The T2Lyme Panel identifies the microorganisms responsible for most cases of Lyme disease in North America and Europe and are detected directly in whole blood using T2MR and the same methodology used in the T2Candida and T2Bacteria tests. Preliminary data

demonstrate that the detection of three species of *Borrelia* at limits of detection as low as 10 cells/mL was achieved in spiked whole blood and detection of spirochetes in clinical samples from patients with early stage Lyme disease has been demonstrated using T2MR.

In 2016 Dr. Tom Lowery, our Chief Scientific Officer, presented on the T2Lyme Panel at a forum titled "Diagnostic Tests for Lyme Disease: A Reassessment" held at the Banbury Center of the Cold Spring Harbor Laboratory. In this presentation he reported preliminary T2Lyme limit of detection data that consisted of N=60 replicates for each target species consisting of three spike preparations of N=20 across three successive days prepared with a quantitative spiking method. Positivity rates were ≥95% for *B. afzelii* and *B. burgdorferi* at 5 cells/mL and B. garinii at 8 cells/mL. Additionally, Dr. Lowery shared data from initial clinical samples. Samples were frozen, ethylenediaminetetraacetic acid whole blood samples from patients diagnosed with Early Stage Lyme disease at the Gunderson Clinic in Wisconsin. All 21 samples had confirmed Erythema multiforme lesions and were tested with a Gunderson Clinic PCR test and the T2Lyme T2MR test. Only one sample tested positive by PCR, which was confirmed by T2MR. Seven additional samples were tested negative by PCR but were tested positive by T2MR. Of the 21 samples, 8 were positive for *B. burgdorferi* by T2MR, demonstrating that T2MR can detect *Borrelia* cells in blood samples from infected patients.

**Sales, Marketing and Distribution**

We are working to drive awareness and adoption of our T2MR technology and related products by building a direct sales force in the United States, initially targeting high-volume hospitals, and continuing to educate physicians, key decision makers and thought leaders through publishing scientific data in peer-reviewed journals, presenting at major industry conferences and conducting and supporting clinical studies. We have added a small team of employees in Europe primarily to support our network of European distributors.

At the end of 2017, our direct sales force consisted of 17 people, excluding managers. Our sales team, employing a clinical data-driven sales approach, focus on the clinical performance of our products, the improved outcomes for patients and the economic value for hospitals, including providing hospitals with customized budget impact analysis. They demonstrate the ease-of-use of our products and the advantages of our products over existing diagnostics and empiric therapy practices. We plan to continue to invest in our direct sales force as we expand both the array of diagnostic panels and our customer reach.

Today, our sales force markets the T2Dx and T2Candida directly to hospitals in the United States, targeting 1,200 hospitals treating the largest number of high-risk patients. The same sales force will market T2Bacteria to those same hospitals after FDA clearance. We estimate that these 1,200 hospitals annually see an average of over 3,400 symptomatic patients at high risk for a *Candida* infection. If these institutions adopt our technology, we expect a positive network effect in the hospital community, accelerating adoption of T2Candida and T2Bacteria. We believe key aspects of healthcare reform, including the focus on cost containment, risk-sharing, and outcomes-based treatment and reimbursement, align with the value proposition of our sepsis products, contributing positively to their adoption. We believe the key decision-makers at hospitals are infectious disease and critical care physicians, laboratory directors, the hospital pharmacy and hospital administrators. In response to the severity and complexity of managing bloodstream infections, a growing number of hospitals have instituted antimicrobial stewardship committees to control hospital practices related to infections, including the use of antibiotic and antifungal therapy. These committees typically include key decision-makers, and we believe they can provide a central forum to present the benefits of our products. In addition, we plan to continue to publish scientific data in peer-reviewed journals, present at major industry conferences and conduct and support clinical trials to provide additional data relative to the performance of T2Candida and T2Bacteria to these decision-makers. For the year ended December 31, 2017, the Company derived approximately 19% of its total revenue from one customer and 10% of its total revenue from a second customer.

Outside of the United States, we have received regulatory approvals in Europe and expect to seek regulatory approvals in other international markets. We market our platform primarily through distributor partners who deploy a similar model to our sales approach in the United States. In July 2014, we received CE marking for T2Candida and the T2Dx and in September 2017 we received CE marking for T2Bacteria. As of the end of 2017, we had distributors with territories in Italy, Spain, Portugal, Germany, France, Denmark, Sweden, Norway, Poland, the Czech Republic, Austria, Slovenia, Slovakia, Hungary, Romania, Croatia, Bulgaria, Serbia and Kuwait. These distributors have knowledge of infectious diseases and/or microbiology. They typically have strong, existing relationships with international thought leaders in these areas and have good relationships with important hospitals in their respective countries. We continue to develop partner relationships in other key international markets and will further investigate potential distribution channels in other key markets around the world. We have employed a small team of direct sales/marketing and field service personnel primarily to support the efforts of our distributors in the European Union, or the EU.

**Manufacturing**

We manufacture our proprietary T2Dx at our manufacturing facility in Lexington, Massachusetts and our T2Candida and T2Bacteria reagent trays at our manufacturing facility in Wilmington, Massachusetts. We perform all instrument and tray manufacturing and packaging of final components in accordance with applicable guidelines for medical device manufacturing. We outsource manufacturing of our T2Candida and T2Bacteria consumable cartridge to a contract manufacturing organization. Our particles are supplied by a sole source supplier, GE Healthcare. We believe we can secure arrangements with other suppliers on commercially reasonable terms for the products and parts we outsource.

We have implemented a quality management system designed to comply with FDA regulations and International Standards Organization, or ISO, standards governing medical device products. These regulations govern the design, manufacture, testing, release and service of diagnostic products as well as raw material receipt and control. We have received ISO 13485:2012 registration from the National Standards Authority of Ireland. Our key outsourcing partners are ISO-certified.

We plan to continue to manufacture components that we determine are proprietary or require special processes to produce, while outsourcing the manufacture of more commodity-like components. We expect to establish additional outsourcing partnerships as we manufacture more products. We believe our facility in Wilmington, Massachusetts is adequate to meet our current manufacturing needs and that additional manufacturing space is readily available for future expansion.

**Intellectual Property**

We strive to protect and enhance the proprietary technologies that we believe are important to our business, and seek to obtain and maintain patents for any patentable aspects of our product and product candidates, including their methods of use and any other inventions that are important to the development of our business. Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for commercially important proprietary technology, inventions and know-how related to our business, including our methods, processes and product candidate designs, and our ability to defend and enforce our patents, maintain our licenses to use intellectual property owned by third parties, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and other proprietary rights of third parties. We also rely on trademarks, copyrights, know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen, and maintain our proprietary position in the fields targeted by our products and product candidates. Protecting these rights is a primary focus in our relationships with other parties, and we seek to protect such rights, in part, by entering into confidentiality and non-disclosure agreements with such third parties and including protections for such proprietary information and intellectual property rights in our other contracts with such third parties, including material transfer agreements, licenses and research agreements.

We are the owner or licensee of over 60 patents and over 40 patent applications and possess substantial know-how and trade secrets which protect various aspects of our business and products. The patent families comprising our patent portfolio are primarily focused on protection of a range of general and specific attributes of our proprietary assay architecture and assay instrumentation for our T2Candida product and our T2Bacteria and T2Lyme product candidates, as well as protection of certain aspects of the conduct of the assays and detection of analytes. We also own several patent families covering various aspects of our T2HemoStat assay, including the assay architecture and conduct of the analysis. The issued patents in our patent families that cover T2Candida and T2Bacteria are expected to expire between 2023 and 2034, while additional pending applications covering T2Candida and T2Bacteria would be expected, if issued, to expire as late as 2037. The issued patents in our patent families that cover T2HemoStat are expected to expire between 2029 and 2032, while additional pending applications covering T2HemoStat, if issued, will be expected to expire as late as 2037. The issued patents in our patent families that cover T2Lyme are expected to expire between 2023 and 2034, while additional pending applications covering T2Lyme would be expected, if issued, to expire as late as 2037. In all cases, the expiration dates are subject to any extension that may be available under applicable law.

***Proprietary Rights and Processes***

We rely, in some circumstances, on proprietary technology and processes (including trade secrets) to protect our technology. However, these can be difficult to protect. We require all full-time and temporary employees, scientific advisors, contractors and consultants working for us who have access to our confidential information to execute confidentiality agreements in order to safeguard our proprietary technologies, methods, processes, know-how, and trade secrets. We also seek to preserve the integrity and confidentiality of our proprietary technology and processes by maintaining physical security of our premises and physical and electronic security of our information technology systems. All of our full-time and temporary employees and independent contractors and consultants are also bound by invention assignment obligations, pursuant to which rights to all inventions and other types of intellectual property conceived by them during the course of their employment are assigned to us.

While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. To the extent that our employees, consultants, scientific advisors, contractors, or any future collaborators use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. Further, any of our intellectual property and proprietary rights could be challenged, invalidated, circumvented, infringed or misappropriated, or such intellectual property and proprietary rights may not be sufficient to provide competitive advantages. For more information, please see “Risks Related to Intellectual Property.”

***Trademarks***

We seek trademark and service mark protection in key markets to safeguard our brand and the brands of our products and product candidates. We intend to file trademark registration applications in the U.S. and foreign jurisdictions to continue to strengthen our brand.

***License Agreements***

*License Agreement with Massachusetts General Hospital*

In 2006, we entered into an exclusive license agreement with MGH, pursuant to which MGH granted to us an exclusive, worldwide, sublicensable license under certain patent rights to make, use, import and commercialize products and processes for diagnostic, industrial and research and development purposes. In 2008 and 2011, we amended our agreement with MGH to add patent rights and to modify, among other things, our diligence and payment obligations.

We are required to use reasonable commercial efforts to develop and make available to the public products and processes covered by the agreement, and to achieve specified organizational, development and commercialization milestones by specified dates. To date, we have met all of our diligence obligations pursuant to this agreement.

We paid MGH an upfront fee and issued to MGH shares of our common stock equal to a low single-digit percentage of our then-outstanding common stock, subject to limited adjustments to prevent dilution in certain circumstances. In addition, we are responsible for reimbursing MGH's costs associated with prosecution and maintenance of the patent rights licensed to us under the agreement. We will also be required to make payments for achievement of specified regulatory milestones with respect to products and processes covered by the agreement. In addition, we are required to pay an annual license maintenance fee, which is creditable against any royalty payments we are obligated to make to MGH under the agreement.

We are required to pay royalties to MGH on net sales of products and processes that are covered by patent rights licensed to us under the agreement at percentages in the low single digits, subject to reductions and offsets in specified circumstances. The products and processes covered by the agreement include T2Candida, T2Bacteria and other particle-based T2MR panels that we may develop in the future. Our royalty obligations, if any, and their duration, will depend on the specific patent rights covering the product or process being sold, and the particular category of product or process, as noted above. With respect to T2Candida and T2Bacteria and other potential particle-based T2MR panels we may develop in the future, our obligation to pay royalties to MGH will expire upon the later of ten years after the first commercial sale of the first product or process in the particular category and the expiration of the patent rights licensed to us under the agreement. We will also be required to pay to MGH a low double-digit percentage of specified gross revenue that we receive from our sublicensees. In addition, we will be required to pay royalties to MGH of less than one percent on net sales of specified products and processes that are not covered by the patent rights licensed to us under the agreement. Our obligation to pay royalties to MGH with respect to such products and processes will expire upon the earlier of 12 years after the first commercial sale of the first such product or process and the termination by MGH of all of the licenses granted to us under the agreement.

We have the right to terminate our agreement with MGH for any reason upon 90 days' written notice to MGH. MGH may terminate our agreement in its entirety if we fail to make a payment required under the agreement and do not cure such failure within a specified time period, if we fail to maintain adequate insurance coverage or if we become insolvent. MGH may also terminate our agreement, with respect to a given category of products or processes, on 60 days' notice for our uncured breach with respect to such category of products or processes. Absent earlier termination, our agreement with MGH will remain in force until the later of the expiration or abandonment of the licensed patents and patent applications, and the expiration of our obligations under the agreement.

***Supply Agreement with SMC Ltd.***

We are currently party to a supply agreement with SMC Ltd. for the supply and manufacture of products related to plastic injection molding, including the consumable cartridge used in connection with the T2Candida Panel. The agreement contains other terms and conditions generally consistent with an agreement for the manufacture and supply of materials or products for use in the development and commercialization of biotechnology products such as our products and product candidates, including with respect to ordering, supply of such product in accordance with specifications, and quality assurance and quality control activities.

The supply agreement may be terminated prior to the end of its term upon the occurrence of certain specified events and further provides that upon termination, including upon the expiration of the term, SMC shall continue to manufacture and ship products subject to outstanding purchase orders and the Company shall be responsible for purchasing finished products, inventory, raw materials and work-in-progress held by SMC to the extent SMC, after the use of commercially reasonable efforts to use such inventory, cannot use such inventory in a financially viable way.

**Competition**

While we believe that we are currently the only diagnostic company developing products with the potential to identify pathogens associated with bloodstream infections in a variety of unpurified patient sample types at limits of detection as low as 1 CFU/mL, we compete with commercial diagnostics companies for the limited resources of our customers. Our principal competition is from a number of companies that offer platforms and applications in our target sepsis markets, most of which are more established commercial organizations with considerable name recognition and significant financial resources.

Companies that currently provide traditional blood culture-based diagnostics include Becton Dickinson & Co. and bioMerieux, Inc. In addition, companies offering post-culture species identification using both molecular and non-molecular methods include bioMerieux, Inc. (and its affiliate, BioFire Diagnostics, Inc.), Bruker Corporation, Accelerate Diagnostics, Luminex, Genmark, Cepheid and Beckman Coulter, a Danaher company. These post-culture competitors rely on a positive result from blood culture in order to perform their tests, significantly prolonging their results when compared to T2MR. Some of the products offered by our competitors require hours of extensive hands-on labor by an operator, while some rely on high concentrations of pathogens present in a positive blood culture, which can require a final concentration of at least 1,000,000 CFU/mL. In addition, there may be a number of new market entrants in the process of developing other post-blood culture diagnostic technologies that may be perceived as competitive with our technology.

We believe that we have a number of competitive advantages, including:

- T2MR's ability to detect targets directly in complex and high volume samples, eliminating the need for sample extraction and purification;
- T2MR's ability to detect a broad range of targets, providing a wide variety of potential applications both within and outside of the *in vitro* diagnostics market;
- T2MR's ability to provide rapid and highly-sensitive diagnostic results, which can provide timely information to assist physicians and hospitals to make therapeutic decisions that can improve patient outcomes and reduce healthcare costs;
- our ability to develop easily operable products for end users;
- our initial applications in the field of sepsis that we believe will not require separate reimbursement codes due to the established payment and reimbursement structure in place; and
- our initial applications may provide substantial economic benefits to hospitals that can accrue the savings related to the rapid treatment of sepsis patients.

**Government Regulation**

Our products under development and our operations are subject to significant government regulation. In the United States, our products are regulated as medical devices by the FDA and other federal, state, and local regulatory authorities.

***FDA Regulation of Medical Devices***

The FDA and other U.S. and foreign governmental agencies regulate, among other things, with respect to medical devices:

- design, development and manufacturing;
- testing, labeling, content and language of instructions for use and storage;
- clinical trials;
- product safety;
- marketing, sales and distribution;
- pre-market clearance and approval;
- record keeping procedures;
- advertising and promotion;
- recalls and field safety corrective actions;
- post-market surveillance, including reporting of deaths or serious injuries and malfunctions that, if they were to recur, could lead to death or serious injury;
- post-market approval studies; and
- product import and export.

In the United States, numerous laws and regulations govern all the processes by which medical devices are brought to market and marketed. These include the Federal Food, Drug and Cosmetic Act, or FDCA, and the FDA's implementing regulations, among others.

***FDA Pre-market Clearance and Approval Requirements***

Each medical device we seek to commercially distribute in the United States must first receive 510(k) clearance, *de novo* down classification, or pre-market approval from the FDA, unless specifically exempted by the FDA. The FDA classifies all medical devices into one of three classes. Devices deemed to pose the lowest risk are categorized as either Class I or II, which requires the manufacturer to submit to the FDA a 510(k) pre-market notification submission requesting clearance of the device for commercial distribution in the United States. Some low risk devices are exempted from this requirement. Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, or devices deemed not substantially equivalent to a previously 510(k) cleared device are categorized as Class III. These devices require submission and approval of a premarket approval, or PMA, application.

*510(k) Clearance Process*

To obtain 510(k) clearance, we must submit a pre-market notification to the FDA demonstrating that the proposed device is substantially equivalent to a previously-cleared 510(k) device, a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet

called for the submission of pre-market approval applications, or is a device that has been reclassified from Class III to either Class II or I. In rare cases, Class III devices may be cleared through the 510(k) process. The FDA's 510(k) clearance process usually takes from three to 12 months from the date the application is submitted and filed with the FDA, but may take significantly longer and clearance is never assured. Although many 510(k) pre-market notifications are cleared without clinical data, in some cases, the FDA requires significant clinical data to support substantial equivalence. In reviewing a pre-market notification submission, the FDA may request additional information, including clinical data, which may significantly prolong the review process. Based on non-binding communications from the FDA, we expect our T2Bacteria Panel to be eligible for a 510(k) submission.

After a device receives 510(k) clearance, any subsequent modification of the device that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, will require a new 510(k) clearance or could require pre-market approval. The FDA requires each manufacturer to make this determination initially, but the FDA may review any such decision and may disagree with a manufacturer's determination. If the FDA disagrees with a manufacturer's determination, the FDA may require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or approval of a PMA is obtained. Under these circumstances, the FDA may also subject a manufacturer to significant regulatory fines or other penalties. In addition, the FDA is currently evaluating the 510(k) process and may make substantial changes to industry requirements, including which devices are eligible for 510(k) clearance, the ability to rescind previously granted 510(k)s and additional requirements that may significantly impact the process.

*Pre-market Approval Process*

A PMA application must be submitted if the medical device is in Class III (although the FDA has the discretion to continue to allow certain pre-amendment Class III devices to use the 510(k) process) or cannot be cleared through the 510(k) process. A PMA application must be supported by, among other things, extensive technical, preclinical, and clinical trials, as well as manufacturing and labeling data to demonstrate to the FDA's satisfaction the safety and effectiveness of the device.

After a PMA application is submitted and filed, the FDA begins an in-depth review of the submitted information, which typically takes between one and three years, but may take significantly longer. During this review period, the FDA may request additional information or clarification of information already provided. Also during the review period, an advisory panel of experts from outside the FDA will usually be convened to review and evaluate the application and provide recommendations to the FDA as to the approvability of the device. In addition, the FDA will conduct a pre-approval inspection of the manufacturing facility to ensure compliance with Quality System Regulation, or QSR, which imposes elaborate design development, testing, control, documentation and other quality assurance procedures in the design and manufacturing process. The FDA may approve a PMA application with post-approval conditions intended to ensure the safety and effectiveness of the device including, among other things, restrictions on labeling, promotion, sale and distribution and collection of long-term follow-up data from patients in the clinical study that supported approval. Failure to comply with the conditions of approval can result in materially adverse enforcement action, including the loss or withdrawal of the approval. New PMA applications or supplements are required for significant modifications to the manufacturing process, labeling of the product and design of a device that is approved through the PMA process. PMA supplements often require submission of the same type of information as an original PMA application, except that the supplement is limited to information needed to support any changes from the device covered by the original PMA application, and may not require as extensive clinical data or the convening of an advisory panel.

*De novo Classification Process*

Medical device types that the FDA has not previously classified as Class I, II, or III are automatically classified into Class III regardless of the level of risk they pose. The Food and Drug Administration Modernization Act of 1997 established a new route to market for low to moderate risk medical devices that are automatically placed into Class III due to the absence of a predicate device, called the "Request for Evaluation of Automatic Class III Designation," or the *de novo* classification procedure. This procedure allows a manufacturer whose novel device is automatically classified into Class III to request down-classification of its medical device into Class I or Class II on the basis that the device presents low or moderate risk, rather than requiring the submission and approval of a PMA application. Prior to the enactment of the Food and Drug Administration Safety and Innovation Act, or FDASIA, in July 2012, a medical device could only be eligible for *de novo* classification if the manufacturer first submitted a 510(k) premarket notification and received a determination from the FDA that the device was not substantially equivalent. FDASIA streamlined the *de novo* classification pathway by permitting manufacturers to request *de novo* classification directly without first submitting a 510(k) premarket notification to the FDA and receiving a not substantially equivalent determination. Under FDASIA, FDA is required to classify the device within 120 days following receipt of the *de novo* application. If the manufacturer seeks reclassification into Class II, the manufacturer must include a draft proposal for special controls that are necessary to provide a reasonable assurance of the safety and effectiveness of the medical device. In addition, the FDA may reject the reclassification petition if it identifies a legally marketed predicate device that would be appropriate for a 510(k) or determines that the device is not low to moderate risk or that general controls would be inadequate to control the risks and special controls cannot be developed. We utilized the *de novo* classification process to obtain marketing clearance for our T2Dx and T2Candida devices, which were given a Class II designation. We received marketing clearance for these devices from the FDA on September 22, 2014.

*Clinical Trials*

A clinical trial is typically required to support a PMA application and is sometimes required for a 510(k) pre-market notification. Clinical trials generally require submission of an application for an Investigational Device Exemption, or IDE, to the FDA. The IDE application must be

supported by appropriate data, such as animal and laboratory testing results, showing that it is safe to test the device in humans and that the investigational protocol is scientifically sound. The IDE application must be approved in advance by the FDA for a specified number of patients, unless the product is deemed a non-significant risk device and eligible for more abbreviated IDE requirements. Clinical trials for a significant risk device may begin once the IDE application is approved by the FDA as well as the appropriate institutional review boards, or IRBs, at the clinical trial sites, and the informed consent of the patients participating in the clinical trial is obtained. After a trial begins, the FDA may place it on hold or terminate it if, among other reasons, it concludes that the clinical subjects are exposed to an unacceptable health risk. Any trials we conduct must be conducted in accordance with FDA regulations as well as other federal regulations and state laws concerning human subject protection and privacy. Moreover, the results of a clinical trial may not be sufficient to obtain clearance or approval of the product.

*Pervasive and Continuing U.S. Food and Drug Administration Regulation*

After a medical device is placed on the market, numerous FDA regulatory requirements apply, including, but not limited to the following:

- the Quality System Regulation, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures during the manufacturing process;
- establishment registration, which requires establishments involved in the production and distribution of medical devices, intended for commercial distribution in the United States, to register with the FDA;
- medical device listing, which requires manufacturers to list the devices they have in commercial distribution with the FDA;
- labeling regulations, which prohibit "misbranded" devices from entering the market, as well as prohibit the promotion of products for unapproved or "off-label" uses and impose other restrictions on labeling; and
- post-market surveillance including Medical Device Reporting, which requires manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury, or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to recur.

The FDA enforces these requirements by inspection and market surveillance. Failure to comply with applicable regulatory requirements may result in enforcement action by the FDA, which may include one or more of the following sanctions:

- untitled letters or warning letters;
- fines, injunctions and civil penalties;
- mandatory recall or seizure of our products;
- administrative detention or banning of our products;
- operating restrictions, partial suspension or total shutdown of production;
- refusing our request for 510(k) clearance or pre-market approval of new product versions;
- revocation of 510(k) clearance or pre-market approvals previously granted; and
- criminal prosecution and penalties.

*International Regulation*

Sales of medical devices outside the United States are subject to foreign government regulations, which vary substantially from country to country. In order to market our products in other countries, we must obtain regulatory approvals and comply with extensive safety and quality regulations in other countries. The time required to obtain approval by a foreign country may be longer or shorter than that required for FDA clearance or approval, and the requirements may differ significantly.

In the European Economic Area, or EEA, which comprises the 28 Member States of the EU plus Liechtenstein, Norway and Iceland, in vitro medical devices are required to conform with the essential requirements of the EU Directive on in vitro diagnostic medical devices (Directive 98/79/EC, as amended). To demonstrate compliance with the essential requirements, the manufacturer must undergo a conformity assessment procedure. The conformity assessment varies according to the type of medical device and its classification. For low-risk devices, the conformity assessment can be carried out internally, but for higher risk devices (self-test devices and those included in List A and B of Annex II of Directive 98/79/EC) it requires the intervention of an accredited EEA Notified Body. If successful, the conformity assessment concludes with the drawing up by the manufacturer of an EC Declaration of Conformity entitling the manufacturer to affix the CE mark to its products and to sell them throughout the EEA. We concluded an assessment of the conformity of the T2Dx and T2Candida with the EU in vitro diagnostic medical devices directive in late 2014, based upon an EC Declaration of Conformity dated July 7, 2014 and updated on September 9, 2015 and May 26, 2016, allowing us to affix the CE mark to these products.

***Other Healthcare Laws***

Our current and future business activities are subject to healthcare regulation and enforcement by the federal government and the states and foreign governments in which we conduct our business. These laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security and physician sunshine laws and regulations.

The federal Anti-Kickback Statute prohibits, among other things, any person from knowingly and willfully offering, soliciting, receiving or providing remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce either the referral of an individual, for an item or service or the purchasing, leasing, ordering, or arranging for or recommending the purchase, lease or order of any good, facility, item or service, for which payment may be made, in whole or in part, under federal healthcare programs such as the Medicare and Medicaid programs. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the Anti-Kickback Statute has been violated.

Further, the recently enacted Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Affordable Care Act, among other things, amends the intent requirement of the federal Anti-Kickback Statute and certain criminal statute governing healthcare fraud statutes to a stricter standard. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them. In addition, the Affordable Care Act codifies case law that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act. The majority of states also have anti-kickback laws which establish similar prohibitions and in some cases may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Additionally, the civil False Claims Act prohibits, among other things, knowingly presenting or causing the presentation of a false or fraudulent claim for payment to, or approval by, the U.S. government. In addition to actions initiated by the government itself, the statute authorizes actions to be brought on behalf of the federal government by a private party having knowledge of the alleged fraud. Because the complaint is initially filed under seal, the action may be pending for some time before the defendant is even aware of the action. If the government intervenes and is ultimately successful in obtaining redress in the matter, or if the plaintiff succeeds in obtaining redress without the government's involvement, then the plaintiff will receive a percentage of the recovery. The federal government is using the False Claims Act, and the accompanying threat of significant liability, in its investigation and prosecution of life sciences companies throughout the country, for example, in connection with the promotion of products for unapproved uses and other sales and marketing practices. The government has obtained multi-million and multi-billion dollar settlements under the False Claims Act in addition to individual criminal convictions under applicable criminal statutes. Given the significant size of actual and potential settlements, it is expected that the government will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created new federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the Anti-Kickback Statute, the Affordable Care Act amended the intent standard for certain healthcare fraud under HIPAA such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

The civil monetary penalties statute imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

Also, as stated above, many states have similar fraud and abuse laws that may be broader in scope and may apply regardless of payor.

Moreover, Section 6002 of the Affordable Care Act included new requirements for device manufacturers, among others, to report certain payments or "transfers of value" provided to physicians and teaching hospitals, and to report ownership and investment interests held by physicians and their immediate family members during the preceding calendar year. Section 6002 of the Affordable Care Act includes in its reporting requirements a broad range of transfers of value including, but not limited to, consulting fees, speaker honoraria, charitable contributions, research payments and grants. We collect data annually and report it to the Centers for Medicare & Medicaid Services, or CMS, no later than the last day of March each year. Failure to report could subject companies to significant financial penalties. Tracking and reporting the required payments and transfers of value may result in considerable expense and additional resources. Several states currently have similar laws and more states may enact similar legislation, some of which may be broader in scope. For example, certain states require the implementation of compliance programs, compliance with industry ethics codes, implementation of gift bans and spending limits, and/or reporting of gifts, compensation and other remuneration to healthcare professionals.

We also may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, including the final omnibus rule published on January 25, 2013, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH, through its implementing regulations, makes certain of HIPAA's privacy and security standards directly applicable to business associates, defined as a person or organization, other than a member of a covered entity's workforce, that creates, receives, maintains or transmits protected health information for or on behalf of a covered entity for a function or activity regulated by HIPAA. In addition to HIPAA criminal penalties, HITECH created four new tiers of civil and monetary penalties and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

The shifting commercial compliance environment and the need to build and maintain robust and expandable systems to comply with different compliance and/or reporting requirements in multiple jurisdictions increase the possibility that a healthcare company may violate one or more of the requirements. If our future operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

***Coverage and Reimbursement***

Maintaining and growing sales of our products and product candidates depends in large part on the availability of adequate coverage and reimbursement from third-party payors, including government programs such as Medicare and Medicaid, private insurance plans and managed care programs. These third-party payors are increasingly limiting coverage and reducing reimbursement for medical products and services. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost-containment programs, including price controls and restrictions on coverage and reimbursement. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. Decreases in third-party reimbursement for our products and/or product candidates or a decision by a third-party payor to not cover our products and/or product candidates could reduce physician utilization of our products, if approved, and have a material adverse effect on our sales, results of operations and financial condition.

Hospitals, clinical laboratories and other healthcare provider customers that may purchase our products and/or product candidates generally bill various third-party payors to cover all or a portion of the costs and fees associated with diagnostic tests, including the cost of the purchase of our products and/or product candidates. We currently expect that the majority of our diagnostic tests will be performed in a hospital inpatient setting, where governmental payors, such as Medicare, generally reimburse hospitals with a single bundled payment that is based on the patients' diagnosis under a classification system known as the Medicare severity diagnosis-related groups, or MS-DRGs, classification for all items and services provided to the patient during a single hospitalization, regardless of whether our diagnostic tests are performed during such hospitalization. To the extent that our diagnostic tests will be performed in an outpatient setting, our products and/or product candidates may be eligible for separate payment using existing Current Procedural Terminology, or CPT, codes. Third-party payors may deny coverage, however, if they determine that our products are not cost-effective as determined by the payor, or are deemed by the third-party payor to be experimental or medically unnecessary. We are unable to predict at this time whether our products and/or product candidates, if approved, will be covered by third-party payors. Nor can we predict at this time the adequacy of payments, whether made separately in an outpatient setting or with a bundled payment amount in an inpatient setting. Our customers' access to adequate coverage and reimbursement for our products and/or product candidates by government and private insurance plans is central to the acceptance of our products. We may be unable to sell our products on a profitable basis if third-party payors deny coverage or reduce their current levels of payment, or if our costs of production increase faster than increases in reimbursement levels.

***Healthcare Reform***

In the United States and foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system seeking, among other things, to reduce healthcare costs that could affect our future results of operations as we begin to directly commercialize our products.

By way of example, in the United States, the Affordable Care Act which was signed into law in March 2010, substantially changed the way healthcare is delivered and financed by both governmental and private insurers. Among other things, the Affordable Care Act:

- established a new Patient-Centered Outcomes Research Institute to oversee and identify priorities in comparative clinical effectiveness research in an effort to coordinate and develop such research;

- implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models; and
- created an independent payment advisory board that will submit recommendations to reduce Medicare spending if projected Medicare spending exceeds a specified growth rate.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. On August 2, 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, including hospitals.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure.

**Research and Development**

We have committed, and expect to commit, significant resources to developing new technologies and products, improving product performance and reliability and reducing costs. We have assembled an experienced research and development team with the scientific, engineering, software and process talent that we believe is required to successfully grow our business. We are currently focused on several product candidates and enhancements utilizing our T2MR platform. We incurred research and development expenses of $23.7 million for the year ended December 31 2017, $24.0 million for the year ended December 31, 2016 and $25.4 million for the year ended December 31, 2015. Research and development expenses represented 41% of our total costs and expenses for the year ended December 31, 2017, 44% of our total costs and expenses for the year ended December 31, 2016 and 55% of our total costs and expenses for the year ended December 31, 2015. Major components of the research and development expenses were salaries and benefits, research-related facility and overhead costs, laboratory supplies, equipment and contract services.

We continuously seek to improve T2MR, including improvements in its technology and accessibility. As we make improvements, we anticipate we will make available new and improved generations of our diagnostic instruments and panels. Our technology developmental efforts are focused on applying T2MR to additional potential applications in the *in vitro* diagnostics area. We believe that technical advantage is important to sustain a competitive advantage, and therefore our research and development efforts are focused on the continued enhancement of our T2MR platform. We are dedicated to ongoing innovation to T2MR and expanding our pipeline of product candidates. Our goal is for T2MR to become a standard of care by providing technology that offers a rapid, sensitive and simple diagnostic alternative to existing methodologies for identifying sepsis, with a long-term objective of targeting the broader *in vitro* diagnostics market.

**Employees**

As of December 31, 2017, we had 161 full-time employees, of which 73 work in operations (which includes manufacturing, service and support, clinical and regulatory support, quality control and quality assurance), 40 in research and development, 21 in general and administrative and 27 in sales and marketing.

**Facilities**

Our corporate headquarters is located in Lexington, Massachusetts, where we currently lease approximately 31,300 square feet of office space, 20,500 square feet of laboratory space and 3,400 square feet of manufacturing space in various facilities. Our base rent, for leases at our corporate headquarters, is $2.1 million annually. We also lease approximately 7,600 square feet in Wilmington, Massachusetts for our manufacturing facility, for $0.1 million annually.

**Corporate and Available Information**

We were incorporated under the laws of the state of Delaware in 2006. Our principal corporate offices are located at 101 Hartwell Avenue, Lexington, MA 02421.

We make available, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or the SEC. We also make these documents and certain public financial information available on our website, which is www.t2biosystems.com. Our SEC reports and other financial information can be accessed through the investor relations section of our website. Some of the information found on our website is not part of this or any other report we file with or furnish to the SEC.

## Item 1A. RISK FACTORS

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our financial statements and the related notes and "Management's Discussion and Analysis of Results of Operations and Financial Condition," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.*

### Risks Related to our Business and Strategy

***We have identified conditions and events that raise substantial doubt about our ability to continue as a going concern, which may hinder our ability to obtain future financing.***

As of December 31, 2017, we had cash and cash equivalents of $41.8 million, which we believe that, together with the additional remaining liquidity remaining on our Term Loan with CRG, should be sufficient to fund our operating expenses through March 2019. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Pursuant to the requirements of Accounting Standards Codification (ASC) 205-40, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern, and as a result of our financial condition and other factors described herein, there is substantial doubt about our ability to continue as a going concern. Our ability to continue as a going concern will depend on our ability to obtain additional funding, as to which no assurances can be given. Our future success depends on our ability to raise capital and/or execute our current operating plan. However, we cannot be certain that these initiatives or raising additional capital, whether through selling additional debt or equity securities or obtaining a line of credit or other loan, will be available to us or, if available, will be on terms acceptable to us. If we issue additional securities to raise funds, these securities may have rights, preferences, or privileges senior to those of our common stock, and our current shareholders may experience dilution. If we are unable to obtain funds when needed or on acceptable terms, we may be required to curtail our current development programs, cut operating costs, forego future development and other opportunities or even terminate our operations, which may involve seeking bankruptcy protection.

***We have incurred significant losses since inception and expect to incur losses in the future. We cannot be certain that we will achieve or sustain profitability.***

We have incurred significant losses since inception through December 31, 2017 and expect to incur losses in the future. Our accumulated deficit as of December 31, 2017 was $266.1 million and we incurred net losses of $62.4 million for the year ended December 31, 2017, and $54.8 million and $45.3 million for the years ended December 31, 2016 and 2015, respectively. We expect that our losses will continue for at least the next few years as we will be required to invest significant additional funds toward the continued development and commercialization of our technology. We also expect that our selling, general and administrative expenses will continue to increase due to the additional costs associated with growing our sales and marketing infrastructure, and obtaining regulatory clearance or approval for our products currently under development. Our ability to achieve or sustain profitability depends on numerous factors, many of which are beyond our control, including the market acceptance of our products and future product candidates, future product development, our ability to achieve marketing clearance from the FDA and international regulatory clearance for future product candidates, our ability to compete effectively against an increasing number of competitors and new products, and our market penetration and margins. We may never be able to generate sufficient revenue to achieve or sustain profitability. As noted above, we and our auditors have identified conditions and events that raise doubt about our ability to continue as a going concern.

***We have a limited operating history and may face difficulties encountered by companies early in their commercialization in competitive and rapidly evolving markets.***

We received marketing clearance from the FDA for the T2Dx Instrument and the T2Candida Panel on September 22, 2014 and began commercializing these products in the fourth quarter of 2014. Accordingly, we have a limited operating history upon which to evaluate our business and forecast our future sales and operating results. In assessing our business prospects, you should consider the various risks and difficulties frequently encountered by companies early in their commercialization in competitive and rapidly evolving markets, particularly companies that develop and sell medical devices. These risks include our ability to:

- implement and execute our business strategy;
- expand and improve the productivity of our sales and marketing infrastructure to grow sales of our products and product candidates;
- increase awareness of our brand;
- manage expanding operations;
- expand our manufacturing capabilities, including increasing production of current products efficiently while maintaining quality standards and adapting our manufacturing facilities to the production of new product candidates;
- respond effectively to competitive pressures and developments;
- enhance our existing products and develop new products;

- obtain and maintain regulatory clearance or approval to commercialize product candidates and enhance our existing products;
- effectively perform clinical trials with respect to our proposed products;
- attract, retain and motivate qualified personnel in various areas of our business; and
- implement and maintain systems and processes that are compliant with applicable regulatory standards.

We may not have the institutional knowledge or experience to be able to effectively address these and other risks that may face our business. In addition, we may not be able to develop insights into trends that could emerge and negatively affect our business and may fail to respond effectively to those trends. As a result of these or other risks, we may not be able to execute key components of our business strategy, and our business, financial condition and operating results may suffer.

***Until we achieve scale in our business model our revenue will be primarily generated from research revenue and the T2Dx Instrument and the T2Candida Panel, and any factors that negatively impact sales of these products may adversely affect our business, financial condition and operating results.***

We began to offer our initial sepsis products for sale in the fourth quarter of 2014 and expect that we will be dependent upon the sales of these products for the majority of our revenue until we receive regulatory clearance or approval for our other product candidates currently in development. Because we currently rely on a limited number of products to generate a significant portion of our revenue, any factors that negatively impact sales of these products, or result in sales of these products increasing at a lower rate than expected, could adversely affect our business, financial condition and operating results and negatively impact our ability to successfully launch future product candidates currently under development.

***If T2MR, our T2Dx and T2Candida products or any of our other product candidates, including T2Bacteria, fail to achieve and sustain sufficient market acceptance, we will not generate expected revenue and our growth prospects, operating results and financial condition may be harmed.***

The commercialization of T2MR, our T2Dx and T2Candida products and the future commercialization of our other product candidates, including T2Bacteria, in the United States and other jurisdictions in which we intend to pursue marketing clearance are key elements of our strategy. If we are not successful in conveying to hospitals that our current products and future product candidates provide equivalent or superior diagnostic information in a shorter period of time compared to existing technologies, or that these products and future product candidates improve patient outcomes or decrease healthcare costs, we may experience reluctance, or refusal, on the part of hospitals to order, and third-party payors to pay for performing a test in which our product is utilized. For example, the T2Candida Panel is labeled for the presumptive diagnosis of candidemia. The results of the web-based survey we conducted of decision makers involved with laboratory purchasing may not be indicative of the actual adoption of T2Candida. In addition, our expectations regarding cost savings from using our products may not be accurate.

These hurdles may make it difficult to demonstrate to physicians, hospitals and other healthcare providers that our current diagnostic products and future product candidates are appropriate options for diagnosing sepsis and impaired hemostasis, may be superior to available tests and may be more cost-effective than alternative technologies. Furthermore, we may encounter significant difficulty in gaining inclusion in sepsis and hemostasis treatment guidelines, gaining broad market acceptance by healthcare providers, third-party payors and patients using T2MR and our related products and product candidates. Furthermore, healthcare providers may have difficulty in maintaining adequate reimbursement for sepsis treatment, which may negatively impact adoption of our products.

If we fail to successfully commercialize our products and product candidates, we may never receive a return on the significant investments in product development, sales and marketing, regulatory, manufacturing and quality assurance we have made and further investments we intend to make, and may fail to generate revenue and gain economies of scale from such investments.

***If T2Lyme does not successfully identify Lyme disease in clinical patients, our future revenue could be negatively impacted.***

If T2Lyme does not successfully identify Lyme disease in clinical patients with adequate clinical sensitivity and specificity, the revenue opportunity for this product candidate could be limited or not realized at all.

***We have limited experience in marketing and selling our products, and if we are unable to expand, manage and maintain our direct sales and marketing organizations, or otherwise commercialize our products, our business may be adversely affected.***

Because we received FDA clearance to sell our initial sepsis products in the third quarter of 2014, we have limited experience marketing and selling our products. As of December 31, 2017, our direct sales organization, including marketing, consisted of 27 employees. Our financial condition and operating results are highly dependent upon the sales and marketing efforts of our sales and marketing employees. If our sales and marketing efforts fail to adequately promote, market and sell our products, our sales may not increase at levels that are in line with our forecasts.

Our future sales growth will depend in large part on our ability to successfully expand the size and geographic scope of our direct sales force in the United States. Accordingly, our future success will depend largely on our ability to continue to hire, train, retain and motivate skilled sales and marketing personnel. Because the competition for their services is high, there is no assurance we will be able to hire and retain additional

personnel on commercially reasonable terms. If we are unable to expand our sales and marketing capabilities, we may not be able to effectively commercialize our products and our business and operating results may be adversely affected.

Outside of the United States, we sell our products through distribution partners and there is no guarantee that we will be successful in attracting or retaining desirable distribution partners for these markets or that we will be able to enter into such arrangements on favorable terms. Distributors may not commit the necessary resources to market and sell our products effectively or may choose to favor marketing the products of our competitors. If distributors do not perform adequately, or if we are unable to enter into effective arrangements with distributors in particular geographic areas, we may not realize international sales and growth.

***Our sales cycle is lengthy and variable and we have a limited sales history, which makes it difficult for us to forecast revenue and other operating results.***

Our sales process involves numerous interactions with multiple individuals within an organization and often includes in-depth analysis by potential customers of our products, performance of proof-of-principle studies, preparation of extensive documentation and a lengthy review process. As a result of these factors and the budget cycles of our potential customers, the time from initial contact with a potential customer to our receipt of a purchase order from such potential customer, varies significantly and can be up to 12 months or longer. Given the length and uncertainty of our anticipated sales cycle, we likely will experience fluctuations in our product sales on a period-to-period basis. Expected revenue streams are highly dependent on hospitals' adoption of our consumables-based business model, and we cannot assure you that our potential hospital clients will follow a consistent purchasing pattern. Moreover, it is difficult for us to forecast our revenue as it is dependent upon our ability to convince the medical community of the clinical utility and economic benefits of our products and their potential advantages over existing diagnostic tests, the willingness of hospitals to utilize our products and the cost of our products to hospitals. In addition, we started selling the T2Dx and T2Candida products in the fourth quarter of 2014 and have a limited sales history to rely on when forecasting revenue and other operating results.

***We may not be able to gain and retain the ongoing support of leading hospitals and key thought leaders, or to continue the publication of the results of new clinical trials in peer-reviewed journals, which may make it difficult to establish T2MR as a standard of care and may limit our revenue growth and ability to achieve profitability.***

Our strategy includes developing relationships with leading hospitals and key thought leaders in the industry. If these hospitals and key thought leaders determine that T2MR and related products are not clinically effective or that alternative technologies are more effective, or if we encounter difficulty promoting adoption or establishing T2MR as a standard of care, our revenue growth and our ability to achieve profitability could be significantly limited.

We believe that the publication of scientific and medical results in peer-reviewed journals and presentation of data at leading conferences are critical to the broad adoption of T2MR. Publication in leading medical journals is subject to a peer-review process, and peer reviewers may not consider the results of studies involving T2MR sufficiently novel or worthy of publication.

***If we are unable to successfully manage our growth, our business will be harmed.***

During the past few years, we have significantly expanded our operations. We expect this expansion to continue to an even greater degree as we continue to commercialize our initial sepsis products, build a targeted sales force, and seek marketing clearance from the FDA and international regulatory bodies for our future product candidates. Our growth has placed, and will continue to place, a significant strain on our management, operating and financial systems and our sales, marketing and administrative resources. As a result of our growth, operating costs may escalate even faster than planned, and some of our internal systems and processes, including those relating to manufacturing our products, may need to be enhanced, updated or replaced. Additionally, our anticipated growth will increase demands placed on our suppliers, resulting in an increased need for us to manage our suppliers and monitor for quality assurance. If we cannot effectively manage our expanding operations, manufacturing capacity and costs, including scaling to meet increased demand and properly managing suppliers, we may not be able to continue to grow or we may grow at a slower pace than expected and our business could be adversely affected.

***Our future capital needs are uncertain, and we may need to raise additional funds in the future.***

We believe that our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for at least the next 12 months from the date of issuance of these consolidated financial statements. However, we may need to raise substantial additional capital to:

- expand our product offerings;
- expand our sales and marketing infrastructure;
- increase our manufacturing capacity;
- fund our operations; and
- continue our research and development activities.

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

- our ability to obtain marketing clearance from the FDA and international regulatory clearance to market our future product candidates;
- market acceptance of our products and product candidates;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the cost of our research and development activities;
- the ability of healthcare providers to obtain coverage and adequate reimbursement by third-party payors for procedures using our products and product candidates;
- the cost and timing of marketing clearance or regulatory clearances;
- the cost of goods associated with our products and product candidates;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, including entering into licensing or collaboration arrangements for products or technology.

We cannot assure you that we will be able to obtain additional funds on acceptable terms, or at all. If we raise additional funds by issuing equity or equity-linked securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may need to liquidate some or all of our assets or delay, reduce the scope of or eliminate some or all of our development programs.

If we do not have, or are not able to obtain, sufficient funds, we may be required to delay development or commercialization of our product candidates or license to third parties the rights to commercialize our product candidates or technologies that we would otherwise seek to commercialize ourselves. We also may need to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our operating results.

***Our future success is dependent upon our ability to create and expand a customer base for our products in large hospitals.***

We market our initial sepsis products to the approximately 1,200 leading hospitals in the United States. We are also targeting the top-tier hospitals in each of the European markets where we currently sell our products. We may not be successful in promoting adoption of our technologies in those targeted hospitals, which may make it difficult for us to achieve broader market acceptance of these products.

***We utilize third-party, single-source suppliers for some components and materials used in our products and product candidates, and the loss of any of these suppliers could have an adverse impact on our business.***

We rely on single-source suppliers for some components and materials used in our products and product candidates. Our ability to supply our products commercially and to develop any future products depends, in part, on our ability to obtain these components in accordance with regulatory requirements and in sufficient quantities for commercialization and clinical testing. We have entered into supply agreements with most of our suppliers to help ensure component availability and flexible purchasing terms with respect to the purchase of such components. While our suppliers have generally met our demand for their products on a timely basis in the past, we cannot assure that they will in the future be able to meet our demand for their products, either because we do not have long-term agreements with those suppliers, our relative importance as a customer to those suppliers, or their ability to produce the components used in our products.

While we believe replacement suppliers exist for all components and materials we obtain from single sources, establishing additional or replacement suppliers for any of these components or materials, if required, may not be accomplished quickly. Even if we are able to find a replacement supplier, the replacement supplier would need to be qualified and may require additional regulatory authority approval, which could result in further delay. While we seek to maintain adequate inventory of the single-source components and materials used in our products in the event of disruption, those inventories may not be sufficient.

If our third-party suppliers fail to deliver the required commercial quantities of materials on a timely basis and at commercially reasonable prices, and we are unable to find one or more replacement suppliers capable of production at a substantially equivalent cost in substantially equivalent volumes and quality on a timely basis, the continued commercialization of our products, the supply of our products to customers and the development of any future products would be delayed, limited or prevented, which could have an adverse impact on our business.

***If we are unable to recruit, train and retain key personnel, we may not achieve our goals.***

Our future success depends on our ability to recruit, train, retain and motivate key personnel, including our senior management, research and development, science and engineering, manufacturing and sales and marketing personnel. In particular, we are highly dependent on the

management and business expertise of John McDonough, our President and Chief Executive Officer. We do not maintain fixed-term employment contracts or key man life insurance with any of our employees. Competition for qualified personnel is intense, particularly in the Boston, Massachusetts area. Our growth depends, in particular, on attracting, retaining and motivating highly trained sales personnel with the necessary scientific background and ability to understand our systems at a technical level. In addition, we may need additional employees at our manufacturing facilities to meet demand for our products as we scale up our sales and marketing operations. Because of the complex and technical nature of our products and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our operating results and growth prospects.

***If our diagnostics do not perform as expected, our operating results, reputation and business will suffer.***

Our future success will depend on the market's confidence that our technologies can provide reliable, high-quality diagnostic results. We believe that our customers are likely to be particularly sensitive to any defects or errors in our products. If our technology fails to detect the presence of *Candida* or another bacterial pathogen and a patient subsequently suffers from sepsis, or if our technology fails to detect impaired hemostasis and a patient faces adverse consequences from the misdiagnosis, then we could face claims against us or our reputation could suffer as a result of such failures. The failure of our current products or planned diagnostic product candidates to perform reliably or as expected could significantly impair our reputation and the public image of our products, and we may be subject to legal claims arising from any defects or errors.

***The diagnostics market is highly competitive. If we fail to compete effectively, our business and operating results will suffer.***

While the technology of our products and product candidates is different than other products currently available, we compete with commercial diagnostics companies for the limited resources of our customers. In this regard, our principal competition is from a number of companies that offer platforms and applications in our target sepsis and hemostasis markets, most of which are more established commercial organizations with considerable name recognition and significant financial resources.

We compete with companies that currently provide traditional blood culture-based diagnostics, including Becton Dickinson & Co. and bioMerieux, Inc. In addition, companies offering post-culture species identification using both molecular and non-molecular methods include bioMerieux, Inc. (and its affiliate, BioFire Diagnostics, Inc.), Bruker Corporation, Accelerate Diagnostics, Luminex, Genmark, Cepheid and Beckman Coulter, a Danaher company.

Most of our expected competitors are either publicly traded, or are divisions of publicly traded companies, and have a number of competitive advantages over us, including:

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

We believe that the principal competitive factors in all of our target markets include:

- impact of products on the health of the patient;
- impact of the use of products on the cost of treating patients in the hospital;
- cost of capital equipment;
- reputation among physicians, hospitals and other healthcare providers;
- innovation in product offerings;
- flexibility and ease-of-use;
- speed, accuracy and reproducibility of results; and
- ability to implement a consumables-based model for panels.

We believe that additional competitive factors specific to the diagnostics market include:

- breadth of clinical decisions that can be influenced by information generated by diagnostic tests;
- volume, quality and strength of clinical and analytical validation data;

- availability of adequate reimbursement for testing services and procedures for healthcare providers using our products; and
- economic benefit accrued to hospitals based on the total cost to treat a patient for a health condition.

We cannot assure you that we will effectively compete or that we will be successful in the face of increasing competition from new products and technologies introduced by our existing competitors or new companies entering our markets. In addition, we cannot assure you that our future competitors do not have or will not develop products or technologies that enable them to produce competitive products with greater capabilities or at lower costs than our products and product candidates. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

***Undetected errors or defects in our products or product candidates could harm our reputation, decrease market acceptance of our products or expose us to product liability claims.***

Our products or product candidates may contain undetected errors or defects. Disruptions or other performance problems with our products or product candidates may damage our customers' businesses and could harm our reputation. If that occurs, we may incur significant costs, the attention of our key personnel could be diverted or other significant customer relations problems may arise. We may also be subject to warranty and liability claims for damages related to errors or defects in our products or product candidates. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our products or product candidates could harm our business and operating results.

The sale and use of products or product candidates or services based on our technologies, or activities related to our research and clinical studies, could lead to the filing of product liability claims if someone were to allege that one of our products contained a design or manufacturing defect. A product liability claim could result in substantial damages and be costly and time consuming to defend, either of which could materially harm our business or financial condition. We cannot assure you that our product liability insurance would adequately protect our assets from the financial impact of defending a product liability claim. Any product liability claim brought against us, with or without merit, could increase our product liability insurance rates or prevent us from securing insurance coverage in the future.

***We may not be able to develop new product candidates or enhance the capabilities of our systems to keep pace with our industry's rapidly changing technology and customer requirements, which could have a material adverse impact on our revenue, results of operations and business.***

Our industry is characterized by rapid technological changes, frequent new product introductions and enhancements and evolving industry standards. Our success depends on our ability to develop new product candidates and applications for our technology in new markets that develop as a result of technological and scientific advances, while improving the performance and cost-effectiveness of our existing product candidates. New technologies, techniques or products could emerge that might offer better combinations of price and performance than the products and systems that we plan to sell. Existing markets for our intended diagnostic product candidates are characterized by rapid technological change and innovation. It is critical to our success that we anticipate changes in technology and customer requirements and physician, hospital and healthcare provider practices and successfully introduce new, enhanced and competitive technologies to meet our prospective customers' needs on a timely and cost-effective basis. At the same time, however, we must carefully manage our introduction of new products. If potential customers believe that such products will offer enhanced features or be sold for a more attractive price, they may delay purchases until such products are available. We may also have excess or obsolete inventory of older products as we transition to new products, and we have no experience in managing product transitions. If we do not successfully innovate and introduce new technology into our anticipated product lines or manage the transitions of our technology to new product offerings, our revenue, results of operations and business will be adversely impacted.

Competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. We anticipate that we will face strong competition in the future as expected competitors develop new or improved products and as new companies enter the market with new technologies and products.

We are developing additional product candidates that we intend to be used with the T2Dx, including T2Bacteria for the detection of certain strains of sepsis-causing bacteria and T2Lyme for the detection of certain strains of Lyme disease-causing bacteria. We may have problems applying our technologies to these other areas and our new applications may not be as effective in detection as our initial applications. Any failure or delay in creating a customer base or launching new applications may compromise our ability to achieve our growth objectives.

***Manufacturing risks may adversely affect our ability to manufacture products and could reduce our gross margins and negatively affect our operating results.***

Our business strategy depends on our ability to manufacture and assemble our current and proposed products in sufficient quantities and on a timely basis so as to meet consumer demand, while adhering to product quality standards, complying with regulatory requirements and managing manufacturing costs. We are subject to numerous risks relating to our manufacturing capabilities, including:

- quality or reliability defects in product components that we source from third party suppliers;
- our inability to secure product components in a timely manner, in sufficient quantities or on commercially reasonable terms;
- our failure to increase production of products to meet demand;

- the challenge of implementing and maintaining acceptable quality systems while experiencing rapid growth;
- our inability to modify production lines to enable us to efficiently produce future products or implement changes in current products in response to regulatory requirements; and
- difficulty identifying and qualifying alternative suppliers for components in a timely manner.

As demand for our products increases, we will need to invest additional resources to purchase components, hire and train employees, and enhance our manufacturing processes and quality systems. If we fail to increase our production capacity efficiently while also maintaining quality requirements, our sales may not increase in line with our forecasts and our operating margins could fluctuate or decline. In addition, although we expect some of our product candidates to share product features and components with the T2Dx and the T2Candida panel, manufacturing of these products may require the modification of our production lines, the hiring of specialized employees, the identification of new suppliers for specific components, or the development of new manufacturing technologies. It may not be possible for us to manufacture these products at a cost or in quantities sufficient to make these products commercially viable. Any future interruptions we experience in the manufacturing or shipping of our products could delay our ability to recognize revenues in a particular quarter and could also adversely affect our relationships with our customers.

***We currently develop, manufacture and test our products and product candidates and some of their components in two facilities. If these or any future facility or our equipment were damaged or destroyed, or if we experience a significant disruption in our operations for any reason, our ability to continue to operate our business could be materially harmed.***

We currently develop our diagnostic products exclusively in a facility in Lexington, Massachusetts and manufacture and test some components of our products and product candidates in, both, Wilmington and Lexington, Massachusetts. If these or any future facility were to be damaged, destroyed or otherwise unable to operate, whether due to fire, floods, hurricanes, storms, tornadoes, other natural disasters, employee malfeasance, terrorist acts, power outages, or otherwise, or if our business is disrupted for any other reason, we may not be able to develop or test our products and product candidates as promptly as our potential customers expect, or possibly not at all.

The manufacture of components of our products and product candidates at our Wilmington facility involves complex processes, sophisticated equipment and strict adherence to specifications and quality systems procedures. Any unforeseen manufacturing problems, such as contamination of our facility, equipment malfunction, or failure to strictly follow procedures or meet specifications, could result in delays or shortfalls in production of our products. Identifying and resolving the cause of any manufacturing issues could require substantial time and resources. If we are unable to keep up with future demand for our products by successfully manufacturing and shipping our products in a timely manner, our revenue growth could be impaired and market acceptance of our product candidates could be adversely affected.

We maintain insurance coverage against damage to our property and equipment, subject to deductibles and other limitations that we believe is adequate. If we have underestimated our insurance needs with respect to an interruption, or if an interruption is not subject to coverage under our insurance policies, we may not be able to cover our losses.

***We may be adversely affected by fluctuations in demand for, and prices of, rare earth materials.***

T2MR relies, in part, on rare earth materials and products. For example, the T2Dx utilizes magnets which are extracted from the earth. Although there are currently multiple suppliers for these rare earth materials, changes in demand for, and the market price of, these magnets could significantly affect our ability to manufacture our T2MR-based instruments and, consequently, our profitability. Rare earth minerals and product prices may fluctuate and are affected by numerous factors beyond our control such as interest rates, exchange rates, inflation or deflation, global and regional supply and demand for rare earth minerals and products, and the political and economic conditions of countries that produce rare earth minerals and products.

***Provisions of our debt instruments may restrict our ability to pursue our business strategies.***

Our credit facilities require us, and any debt instruments we may enter into in the future may require us, to comply with various covenants that limit our ability to, among other things:

- convey, lease, sell, transfer, assign or otherwise dispose of assets;
- change the nature or location of our business;
- complete mergers or acquisitions;
- incur indebtedness;
- encumber assets;
- pay dividends or make other distributions to holders of our capital stock (other than dividends paid solely in common stock);
- make specified investments;

- change certain key management personnel; and
- engage in material transactions with our affiliates.

These restrictions could inhibit our ability to pursue our business strategies. If we default, which includes a material adverse change, under our credit facilities, and such event of default was not cured or waived, the lenders could terminate commitments to lend and cause all amounts outstanding with respect to the debt to be due and payable immediately, which in turn could result in cross defaults under other debt instruments. Our assets and cash flow may not be sufficient to fully repay borrowings under all of our outstanding debt instruments if some or all of these instruments are accelerated upon a default.

We may incur additional indebtedness in the future. The debt instruments governing such indebtedness could contain provisions that are as, or more, restrictive than our existing debt instruments. If we are unable to repay, refinance or restructure our indebtedness when payment is due, the lenders could proceed against the collateral granted to them to secure such indebtedness or force us into bankruptcy or liquidation.

***As part of our current business model, we will seek to enter into strategic relationships with third parties to develop and commercialize diagnostic products.***

We intend to enter into strategic relationships with third parties for future diagnostic products. However, there is no assurance that we will be successful in doing so. Establishing strategic relationships can be difficult and time-consuming. Discussions may not lead to agreements on favorable terms, if at all. To the extent we agree to work exclusively with a party in a given area, our opportunities to collaborate with others or develop opportunities independently could be limited. Potential collaborators or licensors may elect not to work with us based upon their assessment of our financial, regulatory or intellectual property position. Even if we establish new strategic relationships, they may never result in the successful development or commercialization of future products.

***Acquisitions or joint ventures could disrupt our business, cause dilution to our stockholders and otherwise harm our business.***

We may acquire other businesses, products or technologies as well as pursue strategic alliances, joint ventures, technology licenses or investments in complementary businesses. We have not made any acquisitions to date, and our ability to do so successfully is unproven. Any of these transactions could be material to our financial condition and operating results and expose us to many risks, including:

- disruption in our relationships with future customers or with current or future distributors or suppliers as a result of such a transaction;
- unanticipated liabilities related to acquired companies;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- diversion of management time and focus from operating our business to acquisition integration challenges;
- increases in our expenses and reductions in our cash available for operations and other uses;
- possible write-offs or impairment charges relating to acquired businesses; and
- inability to develop a sales force for any additional product candidates.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

Also, the anticipated benefit of any acquisition may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

***If treatment guidelines for sepsis change, or the standard of care evolves, we may need to redesign and seek new marketing clearance from the FDA for our products.***

If treatment guidelines for sepsis change, or the standard of care evolves, we may need to redesign and seek new marketing clearance from the FDA for our products. For example, current treatment recommendations for *Candida* infections, including those published by the *Infectious Diseases Society of America* , call for identical treatment for two species of *Candida, C. albicans* and *C. tropicalis* , and identical treatment for two other species, *C. glabrata* and *C. krusei* . Although our T2Candida test is technically capable of distinguishing among these species, we have designed it based on current treatment guidelines and therefore it does not distinguish between two species if they are subject to the same recommended treatment. Our FDA clearance to market the T2Dx and T2Candida in the United States is also based on current treatment guidelines. If treatment guidelines change so that different treatments become desirable for the two species currently subject to the same recommended treatment, the clinical utility of our T2Candida test could be diminished and we could be required to seek marketing clearance from the FDA for a revised test that would distinguish between the two species.

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

As of December 31, 2017, we had federal net operating loss carryforwards, or NOLs, to offset future taxable income of $229.1 million, which are available to offset future taxable income, if any, through 2037. Under Section 382 of the Internal Revenue Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its NOLs to offset future taxable income. We may have already experienced one or more ownership changes. Depending on the timing of any future utilization of our carryforwards, we may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. In addition, future changes in our stock ownership, as well as other changes that may be outside of our control, could result in additional ownership changes under Section 382 of the Internal Revenue Code. Our NOLs may also be impaired under similar provisions of state law. We have recorded a full valuation allowance related to our NOLs and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

***We face risks related to handling hazardous materials and other regulations governing environmental safety.***

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous materials and the generation, transportation and storage of waste. We may not be in material compliance with these regulations. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business.

***We generate a portion of our revenue internationally and are subject to various risks relating to our international activities which could adversely affect our operating results.***

A portion of our revenue comes from international sources, and we anticipate that we will continue to expand overseas operations. Engaging in international business involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign healthcare and other regulatory requirements and laws, such as those relating to patient privacy or handling of bio-hazardous waste;
- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, data privacy requirements, labor laws and anti-competition regulations;
- export or import restrictions;
- various reimbursement and insurance regimes;
- laws and business practices favoring local companies;
- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- political and economic instability;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;
- foreign exchange controls;
- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting or procuring intellectual property rights.

As we expand internationally, our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Our expenses are generally denominated in the currencies in which our operations are located, which is in the United States. If the value of the U.S. dollar increases relative to foreign currencies in the future, in the absence of a corresponding change in local currency prices, our future revenue could be adversely affected as we convert future revenue from local currencies to U.S. dollars.

If we dedicate resources to our international operations and are unable to manage these risks effectively, our business, operating results and prospects will suffer.

***Our employees, independent contractors, principal investigators, consultants, commercial partners, distributors and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.***

We are exposed to the risk of fraud or other misconduct by our employees, independent contractors, principal investigators, consultants, commercial partners, distributors and vendors. Misconduct by these parties could include intentional, reckless or negligent failures to: comply with the regulations of the FDA and other similar foreign regulatory bodies; provide true, complete and accurate information to the FDA and other similar regulatory bodies; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws and regulations in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately, or disclose unauthorized activities to us. These laws may impact, among other things, our activities with principal investigators and research subjects, as well

as our sales, marketing and education programs. In particular, the promotion, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical studies, which could result in regulatory sanctions and cause serious harm to our reputation. We currently have a code of conduct applicable to all of our employees, but it is not always possible to identify and deter employee misconduct, and our code of conduct and the 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 have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, disgorgement, individual imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. Any of these actions or investigations could result in substantial costs to us, including legal fees, and divert the attention of management from operating our business.

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

We depend on information technology systems for significant elements of our operations, including the storage of data and retrieval of critical business information. 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 systems handling human resources, financial controls and reporting, contract management, regulatory compliance, sales management and other infrastructure operations. These information technology systems may support a variety of functions, including laboratory operations, test validation, quality control, customer service support, billing and reimbursement, research and development activities and general administrative activities. Our clinical trial data is currently stored on a third party's servers.

Information technology systems are vulnerable to damage from a variety of sources, including network failures, malicious 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. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our information technology systems, failures or significant downtime of our information technology systems or those used by our third-party service providers could prevent us from conducting our general business operations. Any disruption or loss of information technology systems on which critical aspects of our operations depend could have an adverse effect on our business. Further, we store highly confidential information on our information technology systems, including information related to clinical data, product designs and plans to create new products. If our servers or the servers of the third party on which our clinical data is stored are attacked by a physical or electronic break-in, computer virus or other malicious human action, our confidential information could be stolen or destroyed.

***Our internal computer systems, or those used by our third-party research institution collaborators, vendors or other contractors or consultants, may fail or suffer security breaches.***

Despite the implementation of security measures, our internal computer systems and those of our vendors and other contractors and consultants may be vulnerable to damage from computer viruses and unauthorized access. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our business operations. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed, which could adversely affect our business, results of operations and financial condition.

**Risks Related to Government Regulation and Diagnostic Product Reimbursement**

***Approval and clearance by the FDA and foreign regulatory authorities for our diagnostic tests takes significant time and requires significant research, development and clinical study expenditures and ultimately may not succeed.***

The medical device industry is regulated extensively by governmental authorities, principally the FDA and corresponding state regulatory agencies. The regulations are very complex and are subject to rapid change and varying interpretations. Regulatory restrictions or changes could limit our ability to carry on or expand our operations or result in higher than anticipated costs or lower than anticipated sales. The FDA and other U.S. governmental agencies regulate numerous elements of our business, including:

- product design and development;
- pre-clinical and clinical testing and trials;
- product safety;
- establishment registration and product listing;
- labeling and storage;

- marketing, manufacturing, sales and distribution;
- pre-market clearance or approval;
- servicing and post-market surveillance;
- advertising and promotion; and
- recalls and field safety corrective actions.

Before we begin to label and market our product candidates for use as clinical diagnostics in the United States, we are required to obtain clearance from the FDA under Section 510(k) of the Federal Food, Drug and Cosmetic Act, approval of a *de novo* reclassification petition for our product, or approval of pre-market approval, or PMA, application from the FDA, unless an exemption from pre-market review applies. In the 510(k) clearance process, the FDA must determine that a proposed device is "substantially equivalent" to a device legally on the market, known as a "predicate" device, with respect to intended use, technology and safety and effectiveness, in order to clear the proposed device for marketing. Clinical data is sometimes required to support substantial equivalence. The PMA pathway requires an applicant to demonstrate the safety and effectiveness of the device based, in part, on extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing and labeling data. The PMA process is typically required for devices that are deemed to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices. However, some devices are automatically subject to the PMA pathway regardless of the level of risk they pose because they have not previously been classified into a lower risk class by the FDA. Manufacturers of these devices may request that FDA review such devices in accordance with the *de novo* classification procedure, which allows a manufacturer whose novel device would otherwise require the submission and approval of a PMA prior to marketing to request down-classification of the device on the basis that the device presents low or moderate risk. If the FDA agrees with the down-classification, the applicant will then receive approval to market the device. This device type can then be used as a predicate device for future 510(k) submissions. The process of obtaining regulatory clearances or approvals, or completing the *de novo* classification process, to market a medical device can be costly and time consuming, and we may not be able to successfully obtain pre-market reviews on a timely basis, if at all.

We received pre-market clearance for our T2Dx Instrument and T2Candida panel under the *de novo* application procedure in September 2014. From time to time, we may make modifications to these products that may require a new 510(k). On September 8, 2017 the Company filed a 510(k) premarket submission for the T2Bacteria Panel with the FDA.

If the FDA requires us to go through a lengthier, more rigorous examination for our future product candidates than we had expected, our product introductions or modifications could be delayed or canceled, which could cause our launch to be delayed or, in the future, our sales to decline. In addition, the FDA may determine that our product candidates require the more costly, lengthy and uncertain PMA process.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- we may not be able to demonstrate to the FDA's satisfaction that our product candidates are safe and effective, sensitive and specific diagnostic tests, for their intended users;
- the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required; and
- the manufacturing process or facilities we use may not meet applicable requirements.

In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our products under development or impact our ability to modify our currently approved or cleared products on a timely basis. For example, in response to industry and healthcare provider concerns regarding the predictability, consistency and rigor of the 510(k) regulatory pathway, the FDA initiated an evaluation of the program, and in January 2011, announced several proposed actions intended to reform the review process governing the clearance of medical devices. The FDA intends these reform actions to improve the efficiency and transparency of the clearance process, as well as bolster patient safety. In addition, as part of the Food and Drug Administration Safety and Innovation Act, or FDASIA, Congress reauthorized the Medical Device User Fee Amendments with various FDA performance goal commitments and enacted several "Medical Device Regulatory Improvements" and miscellaneous reforms which are further intended to clarify and improve medical device regulation both pre- and post-approval.

Any delay in, or failure to receive or maintain, clearance or approval for our product candidates could prevent us from generating revenue from these product candidates and adversely affect our business operations and financial results. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could affect the perceived safety and efficacy of our products and product candidates and dissuade our customers from using our products and product candidates.

Obtaining FDA clearance, *de novo* down classification, or approval for diagnostics can be expensive and uncertain, and generally takes from several months to several years, and generally requires detailed and comprehensive scientific and clinical data. Notwithstanding the expense, these efforts may never result in FDA clearance. Even if we were to obtain regulatory clearance, it may not be for the uses we believe are important or commercially attractive, in which case we would not be permitted to market our product for those uses.

Even if granted, a 510(k) clearance, *de novo* down classification, or PMA approval for any future product would likely place substantial restrictions on how our device is marketed or sold, and the FDA will continue to place considerable restrictions on our products and operations.

For example, the manufacture of medical devices must comply with the FDA's Quality System Regulation, or QSR. In addition, manufacturers must register their manufacturing facilities, list the products with the FDA, and comply with requirements relating to labeling, marketing, complaint handling, adverse event and medical device reporting, reporting of corrections and removals, and import and export. The FDA monitors compliance with the QSR and these other requirements through periodic inspections. If our facilities or those of our manufacturers or suppliers are found to be in violation of applicable laws and regulations, or if we or our manufacturers or suppliers fail to take satisfactory corrective action in response to an adverse inspection, the regulatory authority could take enforcement action, including any of the following sanctions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- customer notifications or repair, replacement, refunds, detention or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying requests for 510(k) marketing clearance or PMA approvals of new products or modified products;
- withdrawing 510(k) marketing clearances or PMA approvals that have already been granted;
- refusing to provide Certificates for Foreign Government;
- refusing to grant export approval for our products; or
- pursuing criminal prosecution.

Any of these sanctions could impair our ability to produce our products and product candidates in a cost-effective and timely manner in order to meet our customers' demands, and could have a material adverse effect on our reputation, business, results of operations and financial condition. We may also be required to bear other costs or take other actions that may have a negative impact on our future sales and our ability to generate profits.

Sales of our diagnostic products and product candidates outside the United States are subject to foreign regulatory requirements governing clinical studies, vigilance reporting, marketing approval, manufacturing, product licensing, pricing and reimbursement. These regulatory requirements vary greatly from country to country. As a result, the time required to obtain approvals outside the United States may differ from that required to obtain FDA clearance and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. Clearance by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure clearance or approval by regulatory authorities in other countries or by the FDA. Foreign regulatory authorities could require additional testing. Failure to comply with these regulatory requirements, or to obtain required clearances or approvals, could impair our ability to commercialize our diagnostic products and product candidates outside of the United States.

***Modifications to our products, if cleared or approved, may require new 510(k) clearances or pre-market approvals, or may require us to cease marketing or recall the modified products until clearances are obtained.***

Any modification to a device authorized for marketing that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design or manufacture, requires a new 510(k) clearance or, possibly, approval of a PMA. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review any manufacturer's decision. The FDA may not agree with our decisions regarding whether new clearances or approvals are necessary. If the FDA disagrees with our determination and requires us to submit new 510(k) notifications or PMAs for modifications to previously cleared products for which we conclude that new clearances or approvals are unnecessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties.

Furthermore, the FDA's ongoing review of the 510(k) program may make it more difficult for us to make modifications to any products for which we obtain clearance, either by imposing more strict requirements on when a manufacturer must submit a new 510(k) for a modification to a previously cleared product, or by applying more onerous review criteria to such submissions. For example, in accordance with FDASIA, the FDA was obligated to prepare a report for Congress on the FDA's approach for determining when a new 510(k) will be required for modifications or changes to a previously cleared device. The FDA recently issued this report and indicated that manufacturers should continue to adhere to the FDA's 1997 Guidance on this topic when making a determination as to whether or not a new 510(k) is required for a change or modification to a device. However, the practical impact of the FDA's continuing scrutiny of the 510(k) program remains unclear.

***A recall of our products, either voluntarily or at the direction of the FDA, or the discovery of serious safety issues with our products that leads to corrective actions, could have a significant adverse impact on us.***

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture of a product or in the event that a product poses an unacceptable risk to health. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of an unacceptable risk to health, component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Under the FDA's medical device reporting regulations, we are required to report to the FDA any incident in which our product may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if

the malfunction were to recur, would likely cause or contribute to death or serious injury. Repeated product malfunctions may result in a voluntary or involuntary product recall. Recalls of any of our products would divert managerial and financial resources and have an adverse effect on our reputation, results of operations and financial condition, which could impair our ability to produce our products in a cost-effective and timely manner in order to meet our customers' demands. Depending on the corrective action we take to redress a product's deficiencies or defects, the FDA may require, or we may decide, that we will need to obtain new approvals or clearances for the device before we may market or distribute the corrected device. Seeking such approvals or clearances may delay our ability to replace the recalled devices in a timely manner. Moreover, if we do not adequately address problems associated with our devices, we may face additional regulatory enforcement action, including FDA warning letters, product seizure, injunctions, administrative penalties, or civil or criminal fines. We may also be required to bear other costs or take other actions that may have a negative impact on our sales as well as face significant adverse publicity or regulatory consequences, which could harm our business, including our ability to market our products in the future.

Any adverse event involving our products could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, would require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

***We may rely on third parties to conduct future studies of our product candidates that may be required by the FDA or other regulatory authorities, and those third parties may not perform satisfactorily.***

We may rely on third parties, including medical investigators, to conduct such studies. Our reliance on these third parties for clinical development activities will reduce our control over these activities. These third parties may not complete activities on schedule or conduct studies in accordance with regulatory requirements or our study design. If applicable, our reliance on third parties that we do not control will not relieve us of any applicable requirement to prepare, and ensure compliance with, various procedures required under good clinical practices. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our studies may be extended, delayed, suspended or terminated, and we may not be able to obtain marketing clearance from the FDA or regulatory clearance for our product candidates.

***Our customers are highly dependent on payment from third-party payors, and inadequate coverage and/or inadequate reimbursement for diagnostic tests using our technology or for procedures using our products and product candidates and the commercial success of our diagnostic products and product candidates would be compromised.***

Successful commercialization of our diagnostic products and product candidates depends, in large part, on the extent to which the costs of our products and product candidates purchased by our customers are reimbursed, either separately or through bundled payment, by third-party private and governmental payors, including Medicare, Medicaid, managed care organizations and private insurance plans. There is significant uncertainty surrounding third-party coverage and reimbursement for the use of tests that incorporate new technology, such as T2MR. There may be significant delays in obtaining coverage and reimbursement for newly approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities.

Hospitals, clinical laboratories and other healthcare provider customers that may purchase our products and product candidates, if approved, generally bill various third-party payors to cover all or a portion of the costs and fees associated with diagnostic tests, including the cost of the purchase of our products and product candidates. We currently expect that the majority of our diagnostic tests will be performed in a hospital inpatient setting, where governmental payors, such as Medicare, generally reimburse hospitals a single bundled payment that is based on the patients' diagnosis under a classification system known as the Medicare severity diagnosis-related groups, classification for all items and services provided to the patient during a single hospitalization, regardless of whether our diagnostic tests are performed during such hospitalization. To the extent that our diagnostic tests will be performed in an outpatient setting, our products and product candidates may be eligible for separate payment, for example, under the Clinical Laboratory Fee Schedule using existing Current Procedural Terminology codes. Third-party payors may deny coverage, however, if they determine that the diagnostic tests using our products are not cost-effective compared to the use of alternative testing methods as determined by the payor, or is deemed by the third-party payor to be experimental or medically unnecessary. Even if third-party payors make coverage and reimbursement available, such reimbursement may not be adequate or these payors' reimbursement policies may have an adverse effect on our business, results of operations, financial condition and cash flows. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained.

Government authorities and other third-party payors are developing increasingly sophisticated methods of controlling healthcare costs, such as by limiting coverage and the amount of reimbursement for various products. Our customers' access to adequate coverage and reimbursement for inpatient procedures using our products and product candidates by government and private insurance plans is central to the acceptance of our products. We cannot predict at this time the adequacy of payments, whether made separately in an outpatient setting or with a bundled payment amount in an inpatient setting. We may be unable to sell our products on a profitable basis if third-party payors deny coverage or reduce their current levels of payment, or if our costs of production increase faster than increases in reimbursement levels.

In many countries outside of the United States, various coverage, pricing and reimbursement approvals are required. We expect that it will take several years to establish broad coverage and reimbursement for testing services based on our products with payors in countries outside of the United States, and our efforts may not be successful.

***We may be subject to federal and state healthcare fraud and abuse laws and other federal and state healthcare laws applicable to our business activities. If we are unable to comply, or have not complied, with such laws, we could face substantial penalties.***

Our operations are, and will continue to be, directly or indirectly subject to various federal and state fraud and abuse laws, including, without limitation, the federal and state anti-kickback statutes, physician payment transparency laws and false claims laws. These laws impact, among other things, our sales and marketing and education programs and require us to implement additional internal systems for tracking certain marketing expenditures and reporting them to government authorities. In addition, we may be subject to patient data privacy and security regulation by both the federal government and the states in which we conduct our business. The healthcare laws and regulations that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly or willfully soliciting, receiving, offering or paying any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, in return for or to induce either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or services for which payment may be made, in whole or in part, under a federal healthcare program such as the Medicare and Medicaid programs;
- federal false claims laws, including the federal civil False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from or approval by a governmental payor program that are false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which established additional federal crimes for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or making materially false statements in connection with the delivery of or payment for healthcare benefits, items or services;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, which governs the conduct of certain electronic healthcare transactions and imposes obligations, including mandatory contractual terms, on certain types of people and entities regarding the security and privacy of protected health information;
- the Physician Payments Sunshine Act under the Affordable Care Act, which requires manufacturers of drugs, devices, biologicals, and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to the CMS information related to payments and other transfers of value to physicians and teaching hospitals, and ownership and investment interests held by physicians and their immediate family members; and
- state or foreign law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that require device companies to comply with the industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require manufacturers to report information related to payments and other transfers of value to physicians, hospitals and other healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent healthcare reforms have strengthened these laws. For example, the Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback statute. A person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to commit a violation. The Affordable Care Act also codified case law by amending the False Claims Act, such that violations of the federal Anti-Kickback Statute are now deemed violations of the False Claims Act.

If 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, disgorgement, contractual damages, reputational harm, the curtailment or restructuring of our operations, the exclusion from participation in federal and state healthcare programs and individual imprisonment, any of which could adversely affect our ability to operate our business and our results of operations.

***Healthcare policy changes, including legislation reforming the United States healthcare system, may have a material adverse effect on our financial condition and results of operations.***

The Affordable Care Act, enacted in March 2010, made changes that significantly impacted the pharmaceutical and medical device industries and clinical laboratories. Beginning in 2013, certain medical device manufacturers were to be required to pay a medical device excise tax in an amount equal to 2.3% of the price for which such manufacturer sells its medical devices. The excise tax applies to our T2Dx Instrument and T2Candida Panel, and we expect that it will apply to some or all of our product candidates. The Consolidated Appropriations Act of 2016, signed into law on December 18, 2015, temporarily suspended the 2.3% medical device excise tax for a two-year period from January 1, 2016 through December 31, 2017. In early 2018, the implementation of this excise tax was once again temporarily suspended until January 1, 2020.

The Affordable Care Act also mandated a reduction in payments for clinical laboratory services paid under the Medicare Clinical Laboratory Fee Schedule, or CLFS, of 1.75% for the years 2011 through 2015 and a productivity adjustment to the CLFS, further reducing payment rates. Some commercial payors are guided by the CLFS in establishing their reimbursement rates. Clinicians may decide not to order clinical diagnostic tests if third-party payments are inadequate, and we cannot predict whether third-party payors will offer adequate reimbursement for procedures utilizing our products and product candidates to make them commercially attractive. To the extent that the diagnostic tests using our products and product candidates are performed on an outpatient basis, these or any future proposed or mandated reductions in payments under the CLFS may apply to some or all of the clinical laboratory tests that our diagnostics customers may use our technology to deliver to Medicare beneficiaries and may indirectly reduce demand for our diagnostic products and product candidates.

Other significant measures for our industry contained in the Affordable Care Act included coordination and promotion of research on comparative clinical effectiveness of different technologies and procedures; initiatives to revise Medicare payment methodologies, such as bundling of payments across the continuum of care by providers and physicians; and initiatives to promote quality indicators in payment methodologies. The Affordable Care Act also includes significant fraud and abuse measures, including required disclosures of certain financial arrangements with physician customers, lower thresholds for violations and increasing potential penalties for such violations. In addition, the Affordable Care Act established an Independent Payment Advisory Board, or IPAB, to reduce the per capita rate of growth in Medicare spending. The IPAB has broad discretion to propose policies to reduce healthcare expenditures, which may have a negative impact on payment rates for services, including our tests. The IPAB proposals may impact payments for clinical laboratory services that our diagnostics customers use our technology to deliver, and for hospital services beginning in 2020, and may indirectly reduce demand for our diagnostic products and product candidates. To the extent that the reimbursement amounts for sepsis decrease, it could adversely affect the market acceptance and hospital adoption of our technologies.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs, including reductions of Medicare payments to providers of up to 2% per fiscal year effective April 1, 2013. Due to subsequent legislative amendments, these reductions will stay in effect through 2024 unless additional congressional action is taken. Further, on January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

The current presidential administration and U.S. Congress has sought to modify, repeal, or otherwise invalidate all, or certain provisions of, the Affordable Care Act. Since taking office, President Trump has continued to support the repeal of all or portions of the Affordable Care Act. There is still uncertainty with respect to the impact President Trump's administration and the U.S. Congress may have, if any, and any changes will likely take time to unfold, and could have an impact on coverage and reimbursement for healthcare items and services covered by plans that were authorized by the Affordable Care Act. However, we cannot predict the ultimate content, timing or effect of any healthcare reform legislation or the impact of potential legislation on us.

We cannot predict whether future healthcare initiatives will be implemented at the federal or state level or in countries outside of the United States in which we may do business, or the effect any future legislation or regulation will have on us. The taxes imposed by the new federal legislation and the expansion in government's effect on the United States healthcare industry may result in decreased profits to us, lower reimbursements by payors for our products and product candidates or reduced medical procedure volumes, any of which may adversely affect our business, financial condition and results of operations.

**Risks Related to Intellectual Property**

***If we are unable to protect our intellectual property effectively, our business would be harmed.***

We rely on patent protection as well as trademark, copyright, trade secret protection and confidentiality agreements to protect the intellectual property rights related to our proprietary technologies. The strength of patents in our field involves complex legal and scientific questions. Uncertainty created by these questions means that our patents may provide only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We own or exclusively license over 35 issued U.S. patents and over 15 pending U.S. patent applications, including provisional and non-provisional filings. We also own or license over 50 pending or granted counterpart applications worldwide. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us and we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

We cannot assure you that any of our currently pending or future patent applications will result in issued patents with claims that cover our products and technologies in the United States or in other foreign countries, and we cannot predict how long it will take for such patents to be issued. Further, issuance of a patent is not conclusive as to its inventorship or scope, and there is no guarantee that our issued patents will include claims that are sufficiently broad to cover our technologies or to provide meaningful protection of our products from our competitors. Further, we cannot be certain that all relevant prior art relating to our patents and patent applications has been found. Accordingly, there may be prior art that can invalidate our issued patents or prevent a patent from issuing from a pending patent application, at all or with claims that have a scope broad enough to provide meaningful protection from our competitors.

Even if patents do successfully issue and even if such patents cover our products and technologies, we cannot assure you that other parties will not challenge the validity, enforceability or scope of such issued patents in the United States and in foreign countries, including by proceedings such as re-examination, inter-partes review, interference, opposition, or other patent office or court proceedings. Moreover, we cannot assure you that if such patents were challenged in court or before a regulatory agency that the patent claims will be held valid, enforceable, or be sufficiently broad to cover our technologies or to provide meaningful protection from our competitors. Nor can we assure you that the applicable court or agency will uphold our ownership rights in such patents. Accordingly, we cannot guarantee that we will be successful in defending challenges made against our patents and patent applications. Any successful third-party challenge to our patents could result in the unenforceability or invalidity of such patents, or narrowing of claim scope, such that we could be deprived of patent protection necessary for the successful commercialization of our products and technologies, which could adversely affect our business.

Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our products and technologies or prevent others from designing around our claims. Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies. These products and technologies may not be covered by claims of issued patents owned by our company. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business. In addition, competitors could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of the protections provided by our intellectual property rights. If our intellectual property, including licensed intellectual property, does not adequately protect our market position against competitors' products and methods, our competitive position could be adversely affected, as could our business.

Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product or product candidate under patent protection could be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we were the first to make the inventions covered by our pending patent applications, or that we were the first to file any patent application related to a product or product candidate. Furthermore, if third parties have filed such patent applications, an interference proceeding in the United States can be initiated by a third party to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available; however the life of a patent, and the protection it affords, is limited.

Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

***We depend on certain technologies that are licensed to us. We do not control the intellectual property rights covering these technologies and any loss of our rights to these technologies or the rights licensed to us could prevent us from selling our products.***

We are a party to a number of license agreements under which we are granted rights to intellectual property that is important to our business and we expect that we may need to enter into additional license agreements in the future. We rely on these licenses in order to be able to use various proprietary technologies that are material to our business, including an exclusive license to patents and patent applications from Massachusetts General Hospital, or MGH, and non-exclusive licenses from other third parties related to materials used currently in our research and development activities, and which we use in our commercial activities. Our rights to use these technologies and employ the inventions claimed in the licensed patents are subject to the continuation of and our compliance with the terms of those licenses. Our existing license agreements impose, and we expect that future license agreements will impose on us, various diligence obligations, payment of milestones or royalties and other obligations. If we fail to comply with our obligations under these agreements, or we are subject to a bankruptcy, the licensor may have the right to terminate the license, in which event we would not be able to market products covered by the license.

As we have done previously, we may need to obtain licenses from third parties to advance our research or allow commercialization of our products and technologies, and we cannot provide any assurances that third-party patents do not exist which might be enforced against our current products and technologies or future products in the absence of such a license. We may fail to obtain any of these licenses on commercially reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected products and technologies, which could materially harm our business and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties or other forms of compensation.

In some cases, we do not control the prosecution, maintenance, or filing of the patents that are licensed to us, or the enforcement of these patents against infringement by third parties. Some of our patents and patent applications were not filed by us, but were either acquired by us or are licensed from third parties. Thus, these patents and patent applications were not drafted by us or our attorneys, and we did not control or have any input into the prosecution of these patents and patent applications either prior to our acquisition of, or entry into a license with respect to, such patents and patent applications. With respect to the patents we license from MGH, although we have rights under our agreement to provide input into prosecution and maintenance activities, and are actively involved in such ongoing prosecution, MGH retains ultimate control over such

prosecution and maintenance. We therefore cannot be certain that the same attention was given, or will continue to be given, to the drafting and prosecution of these patents and patent applications as we may have exercised if we had control over the drafting and prosecution of such patents and patent applications, or that we will agree with decisions taken by MGH in relation to ongoing prosecution activities. We also cannot be certain that drafting or prosecution of the patents and patent applications licensed to us have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents. Further, as MGH retains the right to enforce these patents against third-party infringement, we cannot be certain that MGH will elect to enforce these patents to the extent that we would choose to do so, or in a way that will ensure that we retain the rights we currently have under our license with MGH. If MGH fails to properly enforce the patents subject to our license in the event of third-party infringement, our ability to retain our competitive advantage with respect to our products and product candidates may be materially affected.

In addition, certain of the patents we have licensed relate to technology that was developed with U.S. government grants. Federal regulations impose certain domestic manufacturing requirements and other obligations with respect to some of our products embodying these patents.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. Disputes may arise between us and our licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our products and technologies, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected products and technologies.

***We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, enforceability and validity of others' proprietary rights, or to defend against third-party claims of intellectual property infringement, any of which could be time-intensive and costly and may adversely impact our business or stock price.***

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the medical device and diagnostics industries, including patent infringement lawsuits, interferences, oppositions and inter partes review proceedings before the U.S. Patent and Trademark Office, or U.S. PTO, and corresponding foreign patent offices. While we have not received notices of claims of infringement or misappropriation or misuse of other parties' proprietary rights in the past, we may from time to time receive such notices in the future. Some of these claims may lead to litigation. Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, methods of manufacture or methods of use of our products and technologies. Because patent applications can take many years to issue, third parties may have currently pending patent applications which may later result in issued patents that our products and technologies may infringe, or which such third parties claim are infringed by the use of our technologies. We cannot assure you that we will prevail in such actions, or that other actions alleging misappropriation or misuse by us of third-party trade secrets or infringement by us of third-party patents, trademarks or other rights, or challenging the validity of our patents, trademarks or other rights, will not be asserted against us.

Litigation may be necessary for us to enforce our patent and proprietary rights or to determine the scope, enforceability or validity of the proprietary rights of others. There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the medical diagnostics industry. Third parties may assert that we are employing their proprietary technology without authorization. Many of our competitors have significantly larger and more mature patent portfolios than we currently have. In addition, future litigation may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence or protection. Parties making claims against us for infringement of their intellectual property rights may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our products and technologies. Further, defense of such claims in litigation, regardless of merit, could result in substantial legal fees and could adversely affect the scope of our patent protection, and would be a substantial diversion of employee, management and technical personnel resources from our business. The outcome of any litigation or other proceeding is inherently uncertain and might not be favorable to us. In the event of a successful claim of infringement against us, we could be required to redesign our infringing products or obtain a license from such third party to continue developing and commercializing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms, or at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could therefore incur substantial costs for licenses obtained from third parties, if such licenses were available at all, which could negatively affect our gross margins, or prevent us from commercializing our products and technologies. Further, we could encounter delays

in product introductions, or interruptions in product sales, as we develop alternative methods or products to avoid infringing third-party rights. In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, enforceability or scope of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that may be necessary in the future could result in substantial costs and the diversion of our resources and could have a material adverse effect on our business, operating results or financial condition. Further, if the scope of protection provided by our patents or patent applications is threatened or reduced as a result of litigation, it could discourage third parties from entering into collaborations with us that are important to the commercialization of our products.

We cannot guarantee that we have identified all relevant third-party intellectual property rights that may be infringed by our technology, nor is there any assurance that patents will not issue in the future from currently pending applications that may be infringed by our technology or products or product candidates. We are aware of third parties that have issued patents and pending patent applications in the United States, Europe, Canada, and other jurisdictions in the field of magnetic resonance devices and methods for analyte detection, including the preparation and use of reagents. While we continue to evaluate third-party patents in this area on an ongoing basis, we cannot guarantee that patents we currently are aware of will be found invalid or not infringed if we are accused of infringing them, or if our products are found to infringe, that we will be able to modify our products to cause them to be non-infringing on a timely or cost-effective basis, or at all. We currently monitor the intellectual property positions of some companies in this field that are potential competitors or are conducting research and development in areas that relate to our business, and will continue to do so as we progress the development and commercialization of our products or product candidates. While we continue to evaluate third-party patents in this area on an ongoing basis, we cannot assure you that third parties do not currently have or will not in the future have issued patents or other intellectual property rights that may be infringed by the practice of our technology or the commercialization of our products or product candidates.

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, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or you perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

In addition, certain of our agreements with suppliers, distributors, customers and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims relating to our technologies or products, or rights licensed to them by us. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition.

***If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.***

In addition to pursuing patents on our technology, we also rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our products and technologies and discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents, in order to maintain our competitive position. We take steps to protect our intellectual property, proprietary technologies and trade secrets, in part, by entering into confidentiality agreements with our employees, consultants, corporate partners, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants that obligate them to assign to us any inventions developed in the course of their work for us. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agre ements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. Our 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. 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 illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. If any of the technology or information that we protect as trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them from using that technology or information to compete with us. Misappropriation or unauthorized disclosure of our trade secrets could impair our competitive position and may have a material adverse effect on our business. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret. In addition, others may independently discover our trade secrets and proprietary information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we may consider to be trade secrets or other proprietary information, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all.

***We may be subject to damages resulting from claims that we or 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.***

Many of our employees were previously employed at universities or other medical device companies, including our competitors or potential competitors. Although we seek to protect our ownership of intellectual property rights by ensuring that our agreements with our employees, collaborators and other third parties with whom we do business include provisions requiring such parties to assign rights in inventions to us, we may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of our employees' former employers, or we may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing our products and technologies. 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, which could hamper our ability to commercialize certain potential products, which could severely 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.

***We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.***

We may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in our patents or other intellectual property. We may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing our products and technologies. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

***Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.***

On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. The U.S. PTO is currently developing regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, were enacted March 16, 2013. However, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith 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 and financial condition.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and applications will be due to be paid to the U.S. PTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees due to non-U.S. patent agencies. The U.S. PTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse 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 noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case.

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

We have not yet registered certain of our trademarks, including T2HemoStat, T2Bacteria and T2Lyme, in all of our potential markets, including in international markets. If we apply to register these trademarks, our applications may not be allowed for registration, and our registered trademarks may not be maintained or enforced. In addition, opposition or cancellation proceedings may be filed against our trademark applications and registrations, and our trademarks may not survive such proceedings. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would. Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition by potential partners or customers in our markets of interest. 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 may be adversely affected.

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

The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to technologies relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Also, because we have not pursued patents in all countries, there exist jurisdictions where we are not protected against third parties using our proprietary technologies. Further, compulsory licensing laws or limited enforceability of patents against government agencies or contractors in certain countries may limit our remedies or reduce the value of our patents in those countries.

***We use third-party software that may be difficult to replace or cause errors or failures of our products that could lead to lost customers or harm to our reputation.***

We use software licensed from third parties in our products. In the future, this software may not be available to us on commercially reasonable terms, or at all. Any loss of the right to use any of this software could result in delays in the production of our products until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated with our technologies and products, which could harm our business. In addition, any errors or defects in, or failures of, such third-party software could result in errors or defects in the operation of our products or cause our products to fail, which could harm our business and reputation and be costly to correct. Many of the licensors of the software we use in our products attempt to impose limitations on their liability for such errors, defects or failures. If enforceable, such limitations would require us to bear the liability for such errors, defects or failures, which could harm our reputation and increase our operating costs.

***Intellectual property rights do not necessarily address all potential threats to our competitive advantage.***

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

- others may be able to make diagnostic products and technologies that are similar to our products or product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may be held invalid or unenforceable, 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; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

**Risks Related to Our Common Stock**

***Our executive officers, directors and principal stockholders, if they choose to act together, have the ability to control all matters submitted to stockholders for approval.***

Our executive officers, directors and stockholders who own more than 5% of our outstanding common stock and their respective affiliates, in the aggregate, hold shares representing a significant amount of our outstanding voting stock. As a result, if these stockholders were to choose to act together, they would be able significantly influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership control may:

- delay, defer or prevent a change in control;
- entrench our management and the board of directors; or
- impede a merger, consolidation, takeover or other business combination involving us that other stockholders may desire.

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

Since our initial listing on The NASDAQ Global Market in August 2014, the trading market in our common stock has been extremely limited. The listing of our common stock on The NASDAQ Global Market does not assure that a meaningful, consistent and liquid trading market currently exists. We cannot predict whether a more active market for our common stock will develop or be sustained in the future.

Our executive officers, directors and 5% stockholders and their respective affiliates in the aggregate own a significant percentage of our outstanding shares of common stock, which may adversely affect the liquidity of the trading market for our common stock. If these stockholders continue to hold their shares of common stock, there will be limited trading volume in our common stock, which may make it more difficult for investors to sell their shares and may increase the volatility of our stock price. The absence of an active trading market could adversely affect our stockholders' ability to sell our common stock at current market prices in short time periods, or possibly at all. Additionally, market visibility for our common stock may be limited and such lack of visibility may have a depressive effect on the market price for our common stock.

***The price of our common stock has been volatile and is likely to continue to be volatile, which could result in substantial losses for purchasers of our common stock.***

Our stock price has been and is likely to continue be volatile. The stock market in general has experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the current market price. The market price for our common stock may be influenced by many factors, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- announcements by us relating to the timing of regulatory clearance for our product candidates;
- actual or anticipated changes in our growth rate relative to our competitors;
- competition from existing products or new products that may emerge;
- development of new technologies that may address our markets and may make our technology less attractive;
- changes in physician, hospital or healthcare provider practices that may make our products or product candidates less useful;
- announcements by us, our partners or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes to reimbursement levels by commercial third-party payors and government payors, including Medicare, and any announcements relating to reimbursement levels;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

***We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.***

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company for up to five years following the IPO. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We have taken advantage of reduced reporting burdens in this annual report. In particular, we may not include all of the executive compensation related information that would be required if we were not an emerging growth company. 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 reduced or 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 these accounting standards until they would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

***We will continue to incur significant costs as a result of operating as a public company, and our management will continue to devote substantial time to compliance initiatives and corporate governance practices.***

As a public company, and particularly after we are no longer an emerging growth company, we will continue to incur significant legal, accounting and other expenses. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to continue to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will continue to increase our legal and financial compliance costs and will make some activities more time-consuming and costly.

We continue to be subject to applicable securities rules and regulations. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we are required to furnish a report by our management on our internal control over financial reporting. However, while we remain an emerging growth company, we are not required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we are engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Identifying a material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

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

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. In the event any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our regulatory clearance timelines, clinical trial results or operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

***Provisions in our restated certificate of incorporation and amended and restated bylaws and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.***

Provisions in our restated certificate of incorporation and our amended and restated bylaws may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions include those establishing:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from filling vacancies on our board of directors;

- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the ability of our board of directors to alter our amended and restated bylaws without obtaining stockholder approval;
- the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our amended and restated bylaws or repeal the provisions of our restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chief executive officer, the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may 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 us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

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

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. Our ability to pay cash dividends is prohibited by the terms of our existing credit facility. Any future debt agreements may also preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

***We could be subject to securities class action litigation.***

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

***If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and investors' views of us.***

We are required to comply with Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, subject to certain exceptions. Section 404 of the Sarbanes-Oxley Act requires public companies to conduct an annual review and evaluation of their internal controls and to obtain attestations of the effectiveness of internal controls by independent auditors. However, as discussed in detail below, as an emerging growth company, we are not required to obtain an auditor attestation.

Under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, issuers that qualify as "emerging growth companies" under the JOBS Act will not be required to provide an auditor's attestation report on internal controls for so long as the issuer qualifies as an emerging growth company. We currently qualify as an emerging growth company under the JOBS Act, and we may choose not to provide an auditor's attestation report on internal controls. However, if we cannot favorably assess the effectiveness of our internal control over financial reporting, or if we require an attestation report from our independent registered public accounting firm in the future and that firm is unable to provide an unqualified attestation report on the effectiveness of our internal controls over financial reporting, investor confidence and, in turn, our stock price could be materially adversely affected.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that will need to be evaluated frequently. Our failure to remediate our material weakness in internal controls and thereafter to maintain the effectiveness of our internal controls in accordance with the requirements of the Sarbanes-Oxley Act could have a material adverse effect on the tradability of our common stock, which in turn would negatively impact our business. We could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on the

price of our common stock. In addition, if our efforts to comply with new or changed 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.

Based on our assessment under the [COSO Internal Control-Integrated Framework], management believes that, as of December 31, 2017, our internal control over financial reporting was not effective, as described below in "Management's Annual Report on Internal Control over Financial Reporting".

**Item 1B. UNRESOLVED STAFF COMMENTS**

None.

**Item 2. PROPERTY**

Our corporate headquarters is located in Lexington, Massachusetts, where we currently lease approximately 31,300 square feet of office space, 20,500 square feet of laboratory space and 3,400 square feet of manufacturing space. Our base rent, for leases at our corporate headquarters, is approximately $2.1 million annually. In addition, we lease approximately 7,600 square feet in Wilmington, Massachusetts for our manufacturing facility, under a lease that expires in 2018 for $0.1 million of base rent annually.

**Item 3. LEGAL PROCEEDINGS**

We are not party to any material legal proceedings.

**Item 4. MINE SAFETY DISCLOSURES**

Not applicable.

## PART II.

### Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

**Market Information**

Our common stock has been quoted on The NASDAQ Global Market under the symbol "TTOO" and has been trading since August 7, 2014. The following table sets forth, for the periods indicated, the quarterly high and low sales prices per share of our common stock as reported on The NASDAQ Global Market.

| Year ended December 31, 2017 | High | Low |
|---|---|---|
| First Quarter | $ 6.42 | $ 4.95 |
| Second Quarter | $ 5.40 | $ 3.02 |
| Third Quarter | $ 6.99 | $ 2.50 |
| Fourth Quarter | $ 4.86 | $ 3.60 |

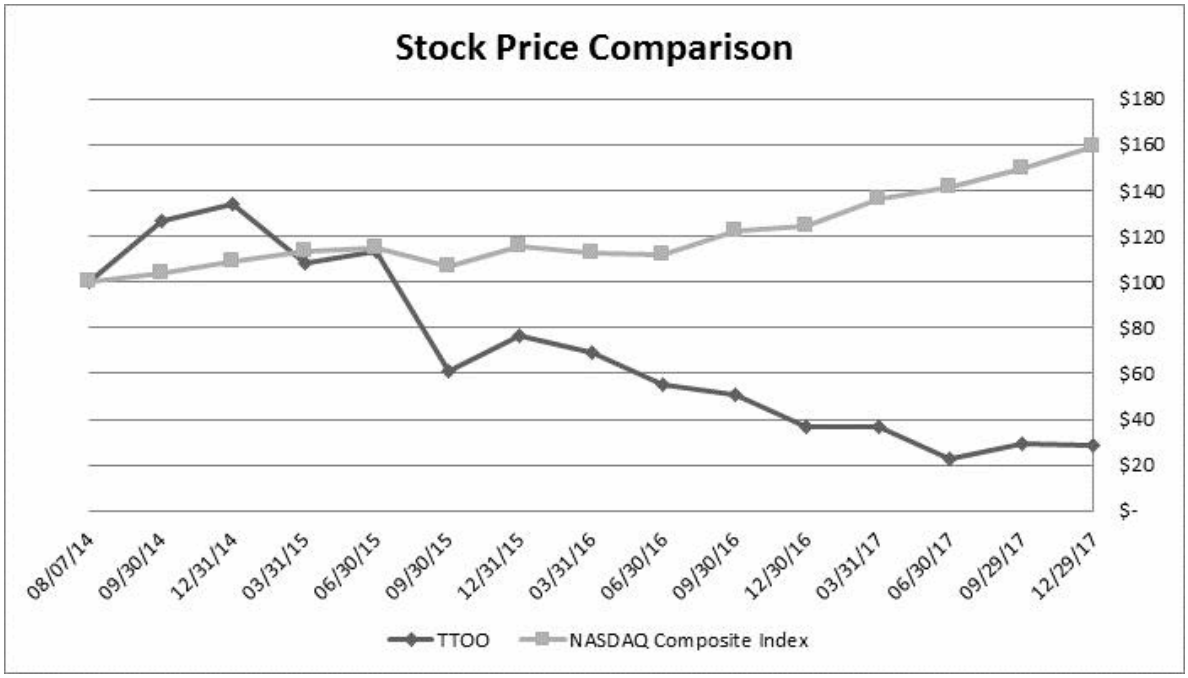
| Year ended December 31, 2016 | High | Low |
|---|---|---|
| First Quarter | $ 11.20 | $ 7.45 |
| Second Quarter | $ 11.30 | $ 7.65 |
| Third Quarter | $ 8.12 | $ 4.92 |
| Fourth Quarter | $ 7.46 | $ 4.89 |

**Dividend Policy**

We have never declared or paid any cash dividends on our common stock and do not expect to pay any dividends for the foreseeable future. We currently intend to retain any future earnings to fund the operation, development and expansion of our business. Any future determination to pay dividends will be at the sole discretion of our Board of Directors and will depend upon a number of factors, including our results of operations, capital requirements, financial condition, future prospects, contractual arrangements, restrictions imposed by applicable law, any limitations on payments of dividends present in our current and future debt arrangements, and other factors our Board of Directors may deem relevant.

**Stock Performance Graph**

The graph below compares the cumulative total stockholder returns on our common stock for the period indicated with the cumulative total stockholder returns on the NASDAQ Composite Index for the same period. The graph assumes that $100 was invested on August 7, 2014 in our common stock in each index and that all dividends were reinvested. No cash dividends have been declared on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.




**Stockholders**

The last reported sale price of common stock on March 15, 2018 as reported on the NASDAQ Global Market was $6.38. As of March 15, 2018, there were 12 holders of record of our common stock.

**Equity Compensation Plan Information**

For information regarding securities authorized for issuance under equity compensation plans, see Part III "Item 12 — Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

**Issuer Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

## Item 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following tables set forth, for the periods and as of the dates indicated, our selected financial data. The consolidated statement of operations data for the years ended December 31, 2017, 2016, and 2015 and consolidated balance sheet data as of December 31, 2017 and 2016 are derived from our audited financial statements in this Annual Report on Form 10-K. We have derived the consolidated statement of operations data for the year ended December 31, 2014 and 2013 and the consolidated balance sheet data as of December 31, 2015, 2014 and 2013 from our audited financial statements not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of our future results.

| | Year ended December 31, | | | | |
|---|---|---|---|---|---|
| **Consolidated Statement of Operations Data:** | **2017** | **2016** | **2015** | **2014** | **2013** |
| | | | (in thousands) | | |
| Revenue: | | | | | |
| Product revenue | $ 3,440 | $ 1,747 | $ 599 | $ — | $ — |
| Research revenue | 1,226 | 2,333 | 2,214 | 119 | 266 |
| Total revenue | 4,666 | 4,080 | 2,813 | 119 | 266 |
| Costs and expenses: | | | | | |
| Cost of product revenue | 12,028 | 6,872 | 1,740 | — | — |
| Research and development | 23,733 | 24,009 | 25,362 | 19,782 | 14,936 |
| Selling, general and administrative | 22,757 | 24,077 | 19,094 | 11,018 | 5,022 |
| Total costs and expenses | 58,518 | 54,958 | 46,196 | 30,800 | 19,958 |
| Loss from operations | (53,852) | (50,878) | (43,383) | (30,681) | (19,692) |
| Interest expense, net | (8,907) | (4,098) | (1,967) | (721) | (403) |
| Other income (expense), net | 331 | 172 | 60 | 12 | (515) |
| Net loss | (62,428) | (54,804) | (45,290) | (31,390) | (20,610) |
| Accretion of redeemable convertible preferred stock to redemption value | — | — | — | (4,570) | (6,908) |
| Net loss applicable to common stockholders | $ (62,428) | $ (54,804) | $ (45,290) | $ (35,960) | $ (27,518) |
| Net loss per share applicable to common stockholders — basic and diluted | $ (1.94) | $ (2.11) | $ (2.21) | $ (4.15) | $ (19.72) |
| Weighted-average number of common shares used in computing net loss per share applicable to common stockholders — basic and diluted (1)(2)(4)(6)(7) | 32,131,512 | 26,015,751 | 20,501,748 | 8,674,931 | 1,395,562 |

| | As of December 31, | | | | |
|---|---|---|---|---|---|
| **Consolidated Balance Sheet Data:** | **2017** | **2016** | **2015** | **2014** | **2013** |
| | | | (in thousands) | | |
| Cash and cash equivalents (1)(2)(3)(4)(5)(7) | $ 41,799 | $ 73,488 | $ 73,662 | $ 73,849 | $ 30,198 |
| Total assets | 54,861 | 89,568 | 86,825 | 78,978 | 31,837 |
| Current liabilities(8) | 51,197 | 9,885 | 12,253 | 5,179 | 4,060 |
| Notes payable, net of current portion (3)(5) | 1,008 | 39,504 | 26,121 | 20,809 | 3,333 |
| Warrants to purchase redeemable securities (6) | — | — | — | — | 1,225 |
| Total liabilities | 53,521 | 50,230 | 39,886 | 26,289 | 8,663 |
| Redeemable convertible preferred stock (6) | — | — | — | — | 112,813 |
| Total stockholders' equity (deficit) (6) | 1,340 | 39,338 | 46,939 | 53,001 | (89,543) |

(1) On December 9, 2015 and December 21, 2015, we issued 3,500,000 shares and 191,049 shares of common stock, respectively, in connection with our secondary public offering at $9.75 per share. We raised approximately $33.3 million in net proceeds.

(2) On August 12, 2014, we issued 5,980,000 shares of common stock in connection with our IPO at $11.00 per share. We raised approximately $58.1 million in net proceeds.

(3) On July 11, 2014, December 30, 2014 and December 28, 2015, we received net proceeds of $9.7 million, $10.0 million and $10.0 million, respectively, from our loan and security agreement with Solar Capital, Ltd.

(4) On September 21, 2016, we sold 6,055,341 shares of common stock at $6.56 per share to Canon U.S.A, Inc., for an aggregate cash purchase price of $39.7 million.

(5) On December 30, 2016, we received net proceeds of $39.2 million from our term loan agreement with CRG Servicing LLC and used $28.0 million from the net proceeds to primarily repay the outstanding balance on our loan and security agreement with Solar Capital, Ltd.

(6) In connection with the closing of our IPO on August 12, 2014, all warrants were net settled into shares of common stock and all shares of redeemable convertible preferred stock were converted into common stock.

(7) On September 15, 2017, the Company sold 5,031,250 shares of its common stock in a CMPO at $4.00 per share, for an aggregate gross cash purchase price of $20.1 million, or proceeds of $18.8 million after underwriters discount and expenses

(8) Current liabilities, as of December 31, 2017, includes a derivative liability of $2.2 million and $39.2 million of CRG debt that was classified as current based on the probability of violating a minimum liquidity covenant included in the debt agreement.

## Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This Annual Report on Form 10-K contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements other than statements of historical facts contained in this Annual Report on Form 10-K, including statements regarding our future results of operations and financial position, business strategy, prospective products and product candidates, their expected performance and impact on healthcare costs, marketing clearance from the U.S. Food and Drug Administration, or the FDA, regulatory clearance, reimbursement for our product candidates, research and development costs, timing of regulatory filings, timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated products, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.*

*In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this Annual Report on Form 10-K are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to a number of risks, uncertainties and assumptions described under the sections in this Annual Report on Form 10-K entitled "Item 1A.—Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Annual Report on Form 10-K. These forward looking statements are subject to numerous risks, including, without limitation, the following:*

- *our status as an early stage company;*
- *our expectation to incur losses in the future;*
- *the market acceptance of our T2MR technology;*
- *our ability to timely and successfully develop and commercialize our existing products and future product candidates;*
- *the length and variability of our anticipated sales cycle;*
- *limited sales history;*
- *our ability to gain the support of leading hospitals and key thought leaders and publish the results of our clinical trials in peer-reviewed journals;*
- *our ability to successfully manage our growth;*
- *our future capital needs and our ability to raise additional funds;*
- *the performance of our diagnostics;*
- *our ability to compete in the highly competitive diagnostics market;*
- *our ability to obtain marketing clearance from the FDA or regulatory clearance for new product candidates in the United States or any other jurisdiction;*
- *federal, state, and foreign regulatory requirements, including FDA regulation of our product candidates;*
- *our ability to protect and enforce our intellectual property rights, including our trade secret-protected proprietary rights in T2MR;*
- *our ability to recruit, train and retain key personnel;*
- *our dependence on third parties;*
- *our ability to continue as a going concern;*
- *manufacturing and other product risks;*
- *the impact of adoption of new accounting standards; and*
- *the Tax Cuts and Jobs Act of 2017 (Tax Reform).*

*These forward-looking statements represent our estimates and assumptions only as of the date of this Annual Report on Form 10-K. Unless required by U.S. federal securities laws, we do not intend to update any of these forward-looking statements to reflect circumstances or events that occur after the statement is made or to conform these statements to actual results. The following discussion should be read in conjunction with the financial statements and notes thereto appearing elsewhere in this Annual Report on Form 10-K. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Item 1A. Risk Factors" in this Annual Report on Form 10-K, and elsewhere in this Annual Report on Form 10-K.*

*You should read the following discussion and analysis of our consolidated financial condition and results of operations together with our consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, 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 "Item 1A.—Risk Factors" section of this Annual Report on Form 10-K, 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.*

**Business Overview**

We are an *in vitro* diagnostics company that has developed an innovative and proprietary technology platform that offers a rapid, sensitive and simple alternative to existing diagnostic methodologies. We are using our T2 Magnetic Resonance technology ("T2MR") to develop a broad set of applications aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier. T2MR enables rapid detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, plasma, serum, saliva, sputum and urine, and can detect cellular targets at limits of detection as low as one colony forming unit per milliliter ("CFU/mL"). Our initial development efforts target sepsis and Lyme disease, which are areas of significant unmet medical need in which existing therapies could be more effective with improved diagnostics.

On September 22, 2014, we received market clearance from the FDA for our first two products, the T2Dx Instrument (the "T2Dx") and the T2Candida Panel ("T2Candida"), which have the ability to rapidly identify the five clinically relevant species of *Candida*, a fungal pathogen known to cause sepsis. In the United States, we have built a direct sales force that is primarily targeting the top 1,200 hospitals with the highest concentration of patients at risk for sepsis-related infections. Outside of the United States, we have primarily partnered with distributors that target large hospitals in their respective markets. Four additional diagnostic applications in various stages of development are called T2Bacteria, T2Candida-auris, T2GNR and T2Lyme, which are focused on bacterial and fungal infections and Lyme disease, respectively. In late 2015, we initiated the collection of patient blood samples to support the clinical trial in the United States for T2Bacteria, and in early 2017, we initiated a multi-site clinical trial for T2Bacteria. The T2Bacteria Panel received authorization to affix a CE mark in July 2017 and is being commercially marketed in Europe and other countries that accept the CE mark. The multi-site clinical study was completed in the United States in August 2017. On September 8, 2017, we filed a 510(k) premarket submission with the FDA requesting market clearance to enable commercial launch of T2Bacteria for clinical use in the United States. T2 Bacteria is currently available in the United States for Research Use Only (RUO). We believe that we may receive a determination from the FDA on our application for the T2Bacteria possibly as early as the second quarter of 2018, although it may take longer for the FDA to reach a decision and there can be no assurance of such a determination within this timeframe or at all. We believe that T2Bacteria, if approved, may expand the number of high risk patients who could be candidates for testing with T2Bacteria. We expect that existing reimbursement codes will support our sepsis and Lyme disease products and product candidates, and that the anticipated economic savings associated with testing of hospital inpatients in the United States with our sepsis products will be realized directly by hospitals.

We believe our sepsis products, which include T2Candida and our product candidate, T2Bacteria, will redefine the standard of care in sepsis management while lowering healthcare costs by improving both the precision and the speed of detection of sepsis-causing pathogens. According to a study published in the Journal of Clinical Microbiology in 2010, targeted therapy for patients with bloodstream infections can be delayed up to 72 hours due to the wait time for blood culture results. In another study published in Clinical Infectious Diseases in 2012, the delayed administration of appropriate antifungal therapy was associated with higher mortality among patients with septic shock attributed to *Candida* infection and, on that basis, the study concluded that more rapid and accurate diagnostic techniques are needed. Due to the high mortality rate associated with Candida infections, physicians often will place patients on antifungal drugs while they await blood culture diagnostic results which generally take at least five days to generate a negative test result. Antifungal drugs are toxic and may result in side effects and can cost over $50 per day. T2Candida's speed to result coupled with its superior sensitivity as compared to blood culture may help reduce the overuse of ineffective, or even unnecessary, antimicrobial therapy which may reduce side effects for patients, lower hospital costs and potentially counteract the growing resistance to antifungal therapy. The administration of inappropriate therapy is a driving force behind the spread of antimicrobial resistant pathogens, which the CDC recently called "one of our most serious health threats." The T2Sepsis Solution refers to the approach of combining the standard of care for the management of sepsis patients with our products, including the T2Dx Instrument, or the T2Dx, T2Candida, and T2Bacteria, which is commercially available in Europe and other countries that accept the CE mark and available for research use only in the United States. The T2Sepsis Solution is designed to enable clinicians to potentially treat 90% of septic patients within the first twelve hours of developing the symptoms of disease. Currently, high risk patients are typically initially treated with broad spectrum antibiotic drugs that typically cover approximately 60% of patients with infections. Of the remaining 40% of patients, approximately 30% of the patients typically have a bacterial infection and 10% typically have Candida infections. T2Candida and our product candidate, T2Bacteria are designed to identify pathogens commonly not covered by broad spectrum antibiotic drugs, which we believe may enable physicians to effectively treat an additional 30% of patients with sepsis related infections beyond the 60% of patients covered by broad spectrum antibiotic drugs.

We compete with traditional blood culture-based diagnostic companies, including Becton Dickinson & Co. and bioMerieux, Inc., as well as companies offering post-culture species identification using both molecular and non-molecular methods, including bioMerieux, Inc. (and its affiliate, BioFire Diagnostics, Inc.), Bruker Corporation, Accelerate Diagnostics, Luminex, Genmark, Cepheid and Beckman Coulter, a Danaher company.

We have never been profitable and have incurred net losses in each year since inception. Our accumulated deficit at December 31, 2017 was $266.1 million. Substantially all of our net losses resulted from costs incurred in connection with our research and development programs and

from selling, general and administrative costs associated with our operations. We have incurred significant commercialization expenses related to product sales, marketing, manufacturing and distribution of our FDA-cleared T2Dx and T2Candida. In addition, we will continue to incur significant costs and expenses as we continue to develop other product candidates, improve existing products and maintain, expand and protect our intellectual property portfolio. We may seek to fund our operations through public equity or private equity or debt financings, as well as other sources. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements if and when needed would have a negative impact on our business, results of operations and financial condition and our ability to develop, commercialize and drive adoption of the T2Dx, T2Candida, our product candidate, T2Bacteria, and future T2MR-based diagnostics.

Pursuant to the requirements of Accounting Standards Codification (ASC) 205-40, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern, management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. This evaluation initially does not take into consideration the potential mitigating effect of management's plans that have not been fully implemented as of the date the financial statements are issued. When substantial doubt exists under this methodology, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued.

Management believes that its existing cash and cash equivalents at December 31, 2017, together with the remaining liquidity on the Term Loan Agreement with CRG, will be sufficient to allow the Company to fund its current operating plan through March 2019. However, because certain elements of the Company's operating plan are outside of the Company's control, including the approval of the Company's T2Bacteria Panel and receipt of certain development and regulatory milestone payments under the Company's Co-Development agreements, they cannot be considered probable according to accounting standards. Under ASC 205-40, the future receipt of potential funding from the Company's Co-Development partners and other resources cannot be considered probable at this time because none of the plans are entirely within the Company's control. In addition, the Company is required to maintain a minimum cash balance under its Term Loan Agreement with CRG (Note 6).

These conditions raise substantial doubt regarding the Company's ability to continue as a going concern for a period of one year after the date that the financial statements are issued. Management's plans to alleviate the conditions, should it be necessary, include raising additional funding, earning milestone payments pursuant the Company's Co- Development agreements, delaying certain research projects and capital expenditures and eliminating certain future operating expenses in order to fund operations at reduced levels for the Company to continue as a going concern for a period of 12 months from the date the financial statements are issued. Management has concluded the likelihood that its plan to obtain sufficient funding from one or more of these sources or adequately reduce expenditures will be successful, while reasonably possible, is less than probable.

***Our Commercial Products and the Unmet Clinical Need***

Our initial FDA-cleared products, the T2Dx and T2Candida, utilize T2MR to detect species-specific *Candida* directly from whole blood in as few as three hours versus the one to six or more days typically required by blood culture-based diagnostics. This allows the patient to potentially receive the correct treatment in four to six hours versus 24 to 144 hours for blood culture. The T2Candida runs on the T2Dx and provides high sensitivity with a limit of detection as low as 1 CFU/mL, even in the presence of antimicrobial therapy.

***Our T2Candida Panel***

Our direcT2 pivotal clinical trial was designed to evaluate the sensitivity and specificity of T2Candida on the T2Dx. The direcT2 trial consisted of two patient arms: a prospective arm with 1,501 samples from patients with a possible infection and a seeded arm with 300 samples, also obtained from patients with a possible infection. T2Candida and the T2Dx demonstrated a sensitivity of 91.1 percent and a specificity of 99.4 percent. In addition, the speed to a species-specific positive result with T2Candida was 4.4 hours versus 129 hours with blood culture. A negative result from T2Candida was obtained in just 4.2 hours versus greater than 120 hours with blood culture. The data and other information from the direcT2 pivotal clinical trial was published in January 2015 in Clinical Infectious Diseases.

Sepsis is one of the leading causes of death in the United States, claiming more lives annually than breast cancer, prostate cancer, and AIDS combined, and it is the most expensive hospital-treated condition. Most commonly afflicting immunocompromised, critical care, and elderly patients, sepsis is a severe inflammatory response to a bacterial or fungal infection with a mortality rate of approximately 30%. According to data published by the U.S. Department of Health and Human Services for 2016, the cost of sepsis was over $23 billion in the United States, or approximately 5% of the total aggregate costs associated with domestic hospital stays. Sepsis is typically caused by one or more of five *Candida* species or over 25 bacterial pathogens, and effective treatment requires the early detection and identification of these specific target pathogens in a patient's bloodstream. Today, sepsis is typically diagnosed through a series of blood cultures followed by post-blood culture species identification. These methods have substantial diagnostic limitations that lead to a high rate of false negative test results, a delay of up to several days in administration of targeted treatment, and the incurrence of unnecessary hospital expense. In addition, the Survey of Physicians' Perspectives and Knowledge About Diagnostic Tests for Bloodstream Infections in 2015 reported that negative blood culture results are only

trusted by 36% of those physicians. Without the ability to rapidly identify pathogens, physicians typically start treatment of at-risk patients with broad-spectrum antibiotics, which can be ineffective and unnecessary and have contributed to the spread of antimicrobial resistance. According to a study published by Critical Care Medicine in 2006, in sepsis patients with documented hypotension, administration of effective antimicrobial therapy within the first hour of detection was associated with a survival rate of 79.9% and, over the ensuing six hours, each hour of delay in initiation of treatment was associated with an average decrease in survival of 7.6%.

We believe our sepsis products, which include T2Candida and our United States product candidate, T2Bacteria, will redefine the standard of care in sepsis management while lowering healthcare costs by improving both the precision and the speed of detection of sepsis-causing pathogens. According to a study published in the Journal of Clinical Microbiology in 2010, targeted therapy for patients with bloodstream infections can be delayed up to 72 hours due to the wait time for blood culture results. In another study published in Clinical Infectious Diseases in 2012, the delayed administration of appropriate antifungal therapy was associated with higher mortality among patients with septic shock attributed to *Candida* infection and, on that basis, the study concluded that more rapid and accurate diagnostic techniques are needed. Our pivotal clinical trial demonstrated that T2Candida can deliver actionable results in as few as three hours, with an average time to result during the trial of 4.2 hours, compared to the average time to result of one to six or more days typically required for blood-culture-based diagnostics, which we believe will potentially enable physicians to make treatment decisions and administer targeted treatment to patients in four to six hours versus 24 to 144 hours for blood culture. We believe that T2Bacteria will also deliver actionable results in similar timeframes because this diagnostic panel operates similarly to T2Candida and is designed to run on the same instrument as T2Candida.

*Candida* is the fourth leading hospital-acquired bloodstream infection, afflicting more than 135,000 patients per year in the United States, and the most lethal form of common bloodstream infections that cause sepsis, with an average mortality rate of approximately 40%. This high mortality rate is largely due to a delay in providing targeted therapy to the patient due to the elapsed time from *Candida* infection to positive diagnosis. According to a study published in Antimicrobial Agents and Chemotherapy, the *Candida* mortality rate can be reduced to 11% with the initiation of targeted therapy within 12 hours of presentation of symptoms. Additionally, a typical patient with a *Candida* infection averages 40 days in the hospital, including nine days in intensive care, resulting in an average cost per hospital stay of more than $130,000 per patient. In a study published in the American Journal of Respiratory and Critical Care Medicine, providing targeted antifungal therapy within 24 hours of the presentation of symptoms decreased the length of hospital stay by approximately ten days and decreased the average cost of care by approximately $30,000 per patient. Furthermore, in April 2015, Future Microbiology published the results of an economic study regarding the use of T2Candida conducted by IMS Health, a healthcare economics agency. In that economic study, IMS demonstrated that an average hospital admitting 5,100 patients at risk for *Candida* infections could save approximately $5.8 million annually due to decreased hospital stays for patients, reduction in use of antifungal drugs and other associated savings. The economic study further showed T2Candida can potentially reduce the costs of care by $26,887 per *Candida* patient and that rapid detection of *Candida* reduces patient deaths by 60.6%. Results from a data analysis of T2Candida for the detection and monitoring of *Candida* infection and sepsis were published comparing aggregated results from the use of T2Candida to blood culture-based diagnostics for the detection of invasive candidiasis and candidemia. The analysis included samples acquired from more than 1,900 patients. Out of 55 prospective patient cases that were tested with T2Candida and blood culture and determined to be positive or likely to be positive for a *Candida* infection, T2Candida detected 96.4% of the patients (53 cases) compared to detection of 60% of the patients (33 cases) with blood culture. During 2016, a number of T2Candida users presented data on their experiences with the T2Candida Panel which demonstrated both the clinical and economic benefits of use of the T2Candida Panel in the diagnostic regimen. The Henry Ford Health System in Detroit, Michigan reported data on a pre- and post-T2Candida implementation analysis that covered 6 months of clinical experience. The data showed a statistically significant ($p = 0.009$) seven day reduction in median Intensive Care Unit ("ICU") length of stay per positive patient that was identified as positive for Candida after implementation of the T2Candida test panel and a trend ($p = 0.164$) of total hospital length of stay reduction of four days. The data also showed significant reductions in use of antifungal drugs for negative patients tested with T2Candida. The overall economic savings resulting from these clinical benefits was projected to be approximately $2.3 million on an annualized basis. The Lee Health System in Fort Myers, Florida compared patient and economic experience before and after T2Candida implementation. The data demonstrated that in the post-T2Candida cohort, median length of stay for patients with Candida infections was reduced by 7 days when detected by T2Candida while unnecessary antifungal therapy was avoided in 41% of patients tested and was discontinued after one dose in another 15% of patients tested. The average economic savings derived solely from reduction in antifungal drug use was $195 per patient tested, net of the cost of the T2Candida test panel. Huntsville Hospital in Huntsville, Alabama, reported that the use of the T2Candida test panel resulted in a reduction in the duration of therapy and time to de-escalation in patients that tested negative for Candida on the T2Candida test panel, yielding net pharmacy savings of approximately $280 per patient tested. T2Candida also detected 56% more positive patients than blood culture. Finally, Riverside Community Hospital in Riverside, California, demonstrated improvements in time to appropriate therapy, increased sensitivity, and rapid discontinuation of antifungal therapy when using T2Candida. Specifically, 83% of patients who tested positive with T2Candida received appropriate therapy within six hours of the blood draw and 100% of patients received appropriate therapy in under nine hours. None of the patients who tested positive had been identified to have been treated with antifungals prior to T2Candida testing. In addition, antifungal therapy was discontinued for 100% of the patients who tested negative with T2Candida.

Due to the high mortality rate associated with Candida infections, physicians often will place patients on antifungal drugs while they await blood culture diagnostic results which generally take at least five days to generate a negative test result. Antifungal drugs are toxic and may result in side effects and can cost over $50 per day. T2Candida's speed to result coupled with its superior sensitivity as compared to blood culture may help reduce the overuse of ineffective, or even unnecessary, antimicrobial therapy which may reduce side effects for patients, hospital costs and potentially, the growing resistance to antifungal therapy. This inappropriate therapy is a driving force behind the spread of antimicrobial-resistant pathogens, which the CDC recently called "one of our most serious health threats."

***Our T2Candida auris Panel***

On September 6, 2017, we announced that the CDC has agreed to validate the T2Dx Instrument and the T2Cauris investigational use only panel in their laboratory for potentially testing and monitoring the emergence and outbreaks of the superbug Candida auris in hospitals around the country. Candida auris is a multi-drug resistant pathogen recognized by the CDC as a "serious global health threat" because it can be resistant to "all three major classes of antifungal drugs" and difficult to identify. The CDC has also reported that more than one in three patients with *Candida auris* infections have died. Unlike most other species of Candida, *Candida auris* can spread quickly in a hospital making rapid identification and hospital environment surveillance a critical component of containing these outbreaks. Existing laboratory methods that detect Candida *auris*, including blood culture, suffer from prolonged detection times and low accuracy, which exacerbates the challenge in the fight to contain the superbug. Recently, reported cases have surged internationally, and the CDC has reported a significant increase in infected patients in the United States. According to the European Centre for Disease Prevention and Control, hospital outbreaks have occurred in the United Kingdom and Spain. Because *Candida auris* can be resistant to most treatment options and can spread so quickly, these hospital outbreaks have been difficult to contain by even the most enhanced control measures. We are also conducting a study in Europe that has demonstrated the ability to detect *Candida auris* directly in patient blood specimens.

***Our T2Bacteria Panel***

We have also developed a product candidate named T2Bacteria, a multiplex diagnostic panel that detects five major bacterial pathogens associated with sepsis and, in conjunction with T2Candida and standard empiric therapy regimens, may enable the early, appropriate treatment of 90% of sepsis patients. T2Bacteria, which will also run on the T2Dx, is expected to address the same approximately 6.75 million symptomatic high-risk patients as T2Candida and also a new population of patients who are at increased risk for bacterial infections, including an additional two million patients presenting with symptoms of infection in the emergency room setting. The T2Bacteria Panel received authorization to affix a CE mark in July 2017 and is being commercially marketed in Europe and other countries that accept the CE mark.

On August 4, 2017 we completed a pivotal clinical study of the T2Bacteria® Panel, run on the T2Dx® Instrument (T2Dx), which is a qualitative T2 Magnetic Resonance (T2MR®) assay designed for the direct detection of bacterial species in EDTA human whole blood specimens from patients with suspected bacteremia. The T2Bacteria Panel is designed to identify five species of bacteria directly from human whole blood specimens: *Enterococcus faecium, Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa,* and *Staphylococcus aureus.* Outside of the United States, the CE marked T2Bacteria panel identifies all 5 of these species along with a 6th species, Acinetobacter Baumannii.

The performance characteristics of the T2Bacteria Panel were evaluated through a series of analytical studies as well as a multi-center clinical study. The clinical study evaluated the performance of the T2Bacteria Panel in comparison to the current standard of care, blood culture. All of the data generated in the analytical studies and the clinical study were submitted to the United States Food and Drug Administration, or FDA, in a 510(k) premarket submission on September 8, 2017.

The clinical study consisted of two arms, a prospective arm and a seeded arm. In the prospective arm, a total of 1,427 subjects were tested at eleven geographically dispersed and demographically diverse sites in the United States. In the seeded arm, 300 specimens of known bacterial composition were evaluated at three sites. Seeded specimens were prepared by spiking whole blood with multiple strains of the bacterial species detected by the T2Bacteria Panel at defined concentrations (CFU/mL). Fifty negative blood samples also were evaluated as part of the seeded arm of the study. In total, 1,777 (1,427 prospective specimens and 350 seeded and negative) clinical samples were tested to evaluate the clinical performance of T2Bacteria Panel.

T2Bacteria is currently available in the United States for RUO and is CE marked and available in Europe and other countries that accept the CE Mark.

***Our Sepsis Solution***

We believe our T2 Magnetic Resonance technology, or T2MR, delivers what no conventional technology currently available can: a rapid, sensitive and simple diagnostic platform to enable sepsis applications that can identify specific sepsis pathogens directly from an unpurified blood sample in hours instead of days at a level of accuracy equal to or better than blood culture-based diagnostics. The T2Sepsis Solution refers to the approach of combining the standard of care for the management of sepsis patients with our products, including the T2Dx Instrument, or the T2Dx, T2Candida, and T2Bacteria, which is commercially available in Europe and other countries that accept the CE mark and available for research use only in the United States. The T2Sepsis Solution is designed to enable clinicians to potentially treat 90% of septic patients within the first twelve hours of developing the symptoms of disease. Currently, high risk patients are typically initially treated with broad spectrum antibiotic drugs that typically cover approximately 60% of patients with infections. Of the remaining 40% of patients, approximately 30% of the patients have a bacterial infection and 10% have Candida infections. T2Candida and product candidate, T2Bacteria are designed to identify pathogens commonly not covered by broad spectrum antibiotic drugs, which we believe may enable physicians to effectively treat an additional 30% of septic patients beyond the 60% of patients covered by broad spectrum antibiotic drugs.

We believe the T2Sepsis Solution provides a pathway for more rapid and targeted treatment of infections, potentially reducing the mortality rate by as much as 75% if a patient is treated within 12 hours of suspicion of infection and significantly reducing the cost burden of sepsis. Each year, approximately 500,000 patients in the United States die from sepsis. According to a study published by *Critical Care Medicine* in 2006, in sepsis patients with documented hypotension, administration of effective antimicrobial therapy within the first hour of detection was associated

with a survival rate of 79.9% and, over the ensuing six hours, each hour of delay in initiation of treatment was associated with an average decrease in survival of 7.6%. According to such study, the survival rate for septic patients who remained untreated for greater than 36 hours was approximately 5%. The toll of sepsis on a patient's health can be severe: more than one-in-five patients die within two years as a consequence of sepsis. Sepsis is also the most prevalent and costly cause of hospital readmissions.

We believe the T2Sepsis Solution addresses a significant unmet need in *in vitro* diagnostics by providing:

- **Limits of Detection as Low as 1 CFU/mL.** T2MR is the only technology currently available that can enable identification of sepsis pathogens directly from a patient's blood sample at limits of detection as low as 1 CFU/mL.
- **Rapid and Specific Results in as Few as Three Hours.** T2MR is the only technology that can enable species-specific results for pathogens associated with sepsis, directly from a patient's blood sample, without the need for blood culture, to deliver an actionable result in three hours.
- **Accurate Results Even in the Presence of Antimicrobial Therapy.** T2MR is the only technology that can reliably detect pathogens associated with sepsis, including slow-growing pathogens, such as *C. glabrata*, directly from a patient's blood sample, even in the presence of an antimicrobial therapy.
- **Easy-to-Use Platform.** T2MR eliminates the need for sample purification or extraction of target pathogens, enabling sample- to-result instruments that can be operated on-site by hospital staff, without the need for highly skilled technicians.

***Our T2Dx Instrument***

Our FDA-cleared T2Dx is an easy-to-use, fully-automated, benchtop instrument utilizing T2MR for use in hospitals and labs for a broad range of diagnostic tests. To operate the system, a patient's sample tube is snapped onto a disposable test cartridge, which is pre-loaded with all necessary reagents. The cartridge is then inserted into the T2Dx, which automatically processes the sample and then delivers a diagnostic test result. Test results are displayed on screen or directly through the lab information system.

By utilizing our proprietary T2MR technology for direct detection, the T2Dx eliminates the need for sample purification and analyte extraction, which are necessary for other optical-detection devices. Eliminating these sample processing steps increases diagnostic sensitivity and accuracy, enables a broad menu of tests to be run on a single platform, and greatly reduces the complexity of the consumables. The T2Dx incorporates a simple user interface and is designed to efficiently process up to seven specimens simultaneously.

***Our T2MR Platform***

T2MR is a miniaturized, magnetic resonance-based approach that measures how water molecules react in the presence of magnetic fields. For molecular and immunodiagnostics targets, T2MR utilizes advances in the field of magnetic resonance by deploying particles with magnetic properties that enhance the magnetic resonance signals of specific targets. When particles coated with target-specific binding agents are added to a sample containing the target, the particles bind to and cluster around the target. This clustering changes the microscopic environment of water in that sample, which in turn alters the magnetic resonance signal, or the T2 relaxation signal that we measure, indicating the presence of the target.

We believe that T2MR can also address the significant unmet need associated with Lyme disease, a tick-borne illness that can cause prolonged neurological disease and musculoskeletal disease. For patients with Lyme disease, early diagnosis and appropriate treatment significantly reduces both the likelihood of developing neurological and musculoskeletal disorders, as well as the significant costs associated with treating these complications. Our product candidate, T2Lyme, will identify the bacteria that cause Lyme disease directly from the patient's blood, without the need for blood culture which, for the bacteria associated with Lyme disease, can take several weeks. Our Lyme product candidate is currently in pre-clinical development and we expect to initiate a T2Lyme clinical trial in 2018.

We believe T2MR is the first technology with the ability to detect directly from a clinical sample of whole blood, plasma, serum, saliva, sputum or urine, saving time and potentially improving sensitivity by eliminating the need for purification or the extraction of target pathogens. T2MR has been demonstrated to detect cellular targets at limits of detection as low as one colony-forming unit per milliliter (CFU/mL). More than 100 studies published in peer reviewed journals have featured T2MR in a breadth of applications.

**Financial Overview**

***Revenue***

We generate revenue from the sale of our products and from activities performed pursuant to research and development agreements.

Revenue earned from activities performed pursuant to research and development agreements is reported as research revenue using the proportional performance method as the work is completed, limited to payments earned, and the related costs are expensed as incurred as research and development expense.

Product revenue is derived from the sale of our instruments and related consumable diagnostic tests, predominantly through our direct sales force in the United States, and distributors in geographic regions outside the United States. We do not offer product return or exchange rights

(other than those relating to defective goods under warranty) or price protection allowances to our customers, including our distributors. Payment terms granted to distributors are the same as those granted to end-user customers and payments are not dependent upon the distributors' receipt of payment from their end-user customers. We recognize product revenue from the sale of our instruments as soon as all applicable revenue recognition criteria have been met. We expect to continue to place our instruments under reagent rental agreements, in hospitals, certain of which may include minimum commitments and/or an incremental charge on the purchase of our consumable diagnostic tests. Under this business model, we believe we will recover the cost of placing our instruments in hospitals through the margins realized from our consumable diagnostic tests. Our consumable diagnostic tests can only be used with our instruments, and accordingly, as the installed base of our instruments grows, we expect the following to occur:

- recurring revenue from our consumable diagnostic tests will increase and become subject to less period-to-period fluctuation;
- consumable revenue will become an increasingly predictable and important contributor to our total revenue; and
- we will gain economies of scale through the growth in our sales, resulting in improving gross margins and operating margins.

Revenue from consumables is based on the volume of tests sold and the price of each consumable unit.

***Cost of Product Revenue***

Cost of product revenue includes the cost of materials, direct labor and manufacturing overhead costs used in the manufacture of our consumable diagnostic tests sold to customers and related license and royalty fees. Cost of product revenue also includes depreciation on the revenue-generating T2Dx Instruments that have been placed with our customers under reagent rental agreements; costs of materials, direct labor and manufacturing overhead costs on the T2Dx Instruments sold to customers; and other costs such as customer support costs, warranty and repair and maintenance expense on the T2Dx Instruments that have been placed with our customers under reagent rental agreements. We manufacture the T2Dx Instruments and part of our consumable diagnostic tests in our facilities. We outsource the manufacturing of components of our consumable diagnostic tests to contract manufacturers.

We expect cost of product revenue to continue to represent a high percentage of our product revenue as we continue to invest in our manufacturing capabilities, infrastructure and customer service organization and grow our installed customer base. We plan to continue to expand our capacity to support our growth, which will result in higher cost of revenue in absolute dollars. However, we expect cost of product revenue, as a percentage of revenue, to decline as revenue grows in the future.

***Research and development expenses***

Our research and development expenses consist primarily of costs, incurred for the development of our technology and product candidates, technology improvements and enhancements, clinical trials to evaluate the clinical utility of our product candidates, and laboratory development and expansion, and include salaries and benefits, including stock-based compensation, research-related facility and overhead costs, laboratory supplies, equipment and contract services. Research and development expenses also include costs of delivering products or services associated with research revenue. We expense all research and development costs as incurred.

We anticipate our overall research and development expenses to continue to be flat to down over the next several quarters in part due to the completion of our T2Bacteria clinical trial. Research and development costs include costs to support research partnerships, clinical trials and new product development. We have committed, and expect to commit, significant resources toward developing additional product candidates, improving existing products, conducting ongoing and new clinical trials and expanding our laboratory capabilities.

***Selling, general and administrative expenses***

Selling, general and administrative expenses consist primarily of costs for our sales and marketing, finance, legal, human resources, business development and general management functions, as well as professional services, such as legal, consulting and accounting services. We expect selling, general and administrative expenses to increase in future periods as we commercialize products and future product candidates and as our needs for sales, marketing and administrative personnel grow. Other selling, general and administrative expenses include facility-related costs, fees and expenses associated with obtaining and maintaining patents, clinical and economic studies and publications, marketing expenses, and travel expenses. We expense all selling, general and administrative expenses as incurred.

***Interest expense, net***

Interest expense, net, consists primarily of interest expense on our notes payable, changes in fair value of our derivative liability and the amortization of deferred financing costs, partially offset by interest earned on our cash and cash equivalents.

***Other income, net***

Other income, net, consists of dividend and other investment income, government grant income and the gain or loss associated with the change in the fair value of our liability for warrants to purchase redeemable securities.

**Results of Operations for the Years Ended December 31, 2017 and 2016**

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | Change |
| | (in thousands) | | |
| Revenue: | | | |
| Product revenue | $ 3,440 | $ 1,747 | $ 1,693 |
| Research revenue | 1,226 | 2,333 | (1,107) |
| Total revenue | 4,666 | 4,080 | 586 |
| Costs and expenses: | | | |
| Cost of product revenue | 12,028 | 6,872 | 5,156 |
| Research and development | 23,733 | 24,009 | (276) |
| Selling, general and administrative | 22,757 | 24,077 | (1,320) |
| Total costs and expenses | 58,518 | 54,958 | 3,560 |
| Loss from operations | (53,852) | (50,878) | (2,974) |
| Interest expense, net | (8,907) | (4,098) | (4,809) |
| Other income, net | 331 | 172 | 159 |
| Net loss | $ (62,428) | $ (54,804) | $ (7,624) |

***Product revenue***

During the year ended December 31, 2017, product revenue totaled $3.4 million, compared to $1.7 million for the year ended December 31, 2016, an increase of $1.7 million. The increase was driven by higher comparable sales of T2Candida consumables and instruments of $1.0 million and $0.7 million, respectively. Higher sales were the result of increased usage of diagnostic tests in the installed base and growth in our installed T2Dx Instrument base, as well as international sales of T2Dx Instruments.

***Research revenue***

We recorded research revenue totaling $1.2 million for the year ended December 31, 2017, compared to $2.3 million for the year ended December 31, 2016, a decrease of $1.1 million. The decrease is due to $1.5 million less revenue recognized under our Co-Development Agreement with Canon US Life Sciences and $0.5 million less revenue recognized for projects completed in 2016. The decrease in revenue under our agreement with Canon US Life Sciences is related to differences in timing between work performed and achievement of milestones and related payments. Decreases in research revenue were partially offset by $0.9 million of revenue recognized under our Co-Development Agreement with Allergan Sales.

***Cost of product revenue***

During the year ended December 31, 2017, cost of product revenue associated with the sale of our T2Candida Panels and T2Dx Instruments to customers totaled $12.0 million, compared to $6.9 million for the year ended December 31, 2016, an increase of $5.2 million. Cost of product revenue includes a $2.6 million impairment charge related to T2-owned instruments and components. During the fourth quarter of 2017, the Company received communication from the FDA that suggested the approval timeline could be longer than the company initially anticipated. We assessed the recoverability of T2-owned instruments based on delayed T2Bacteria cash flows and recorded the impairment charge. Other increases to the cost of product revenue include $0.4 million of depreciation related to T2 owned instruments, $0.6 million related to idle capacity, $1.1 million of costs related to increased sales of T2Dx instruments and $0.5 million of costs related to increase consumables sales.

***Research and development expenses***

Research and development expenses were $23.7 million for the year ended December 31, 2017, compared to $24.0 million for the year ended December 31, 2016, a decrease of approximately $0.3 million. The decrease was primarily due to idle capacity of $1.0 million, related to increased manufacturing production associated with consumables utilized in the T2Bacteria study, decreased pre-clinical expenses of $0.6 million and lower payroll and related expenses of $0.3 million. The decreases in research and development expenses were partially offset by an increase in clinical trial related expenses of $0.9 million, and travel and related expenses of $0.3 million. Increases in these areas were related to the T2Bacteria clinical trial. Decreases in research and development expenses were further offset by a $0.4 million increase in facilities and related costs which include higher depreciation, lab related and engineering prototype expenses.

***Selling, general and administrative expenses***

Selling, general and administrative expenses were $22.8 million for the year ended December 31, 2017, compared to $24.1 million for the year ended December 31, 2016. The decrease of $1.3 million was due primarily to lower payroll and related expenses of approximately $1.6 million, due to attrition, and decreased travel expenses of $0.3 million related to headcount reductions. The decreases in selling, general and

administrative expenses were partially offset by increased outside services expenditures of $0.3 million and increased facility and other selling, general and administrative expenses of $0.4 million.

***Interest expense, net***

Interest expense, net, was $8.9 million for the year ended December 31, 2017, compared to $4.1 million for the year ended December 31, 2016. Interest expense, net, increased by $4.8 million due to $2.6 million higher non-cash interest and $2.2 million related to the change in fair value the derivative liability related to the CRG Term Loan Agreement.

***Other income, net***

Other income, net, was $0.3 million of net income for the year ended December 31, 2017, compared to $0.2 million of net income for the year ended December 31, 2016. Other income, net, increased $0.1 million due primarily to increased dividend and other investment income.

**Results of Operations for the Years Ended December 31, 2016 and 2015**

| | Year ended December 31, | | |
|---|---|---|---|
| | 2016 | 2015 | Change |
| | (in thousands) | | |
| Revenue: | | | |
| Product revenue | $ 1,747 | $ 599 | $ 1,148 |
| Research revenue | 2,333 | 2,214 | 119 |
| Total revenue | 4,080 | 2,813 | 1,267 |
| Costs and expenses: | | | |
| Cost of product revenue | 6,872 | 1,740 | 5,132 |
| Research and development | 24,009 | 25,362 | (1,353) |
| Selling, general and administrative | 24,077 | 19,094 | 4,983 |
| Total costs and expenses | 54,958 | 46,196 | 8,762 |
| Loss from operations | (50,878) | (43,383) | (7,495) |
| Interest expense, net | (4,098) | (1,967) | (2,131) |
| Other income, net | 172 | 60 | 112 |
| Net loss | $ (54,804) | $ (45,290) | $ (9,514) |

***Product revenue***

During the year ended December 31, 2016, product revenue totaled $1.7 million, compared to $0.6 million for the year ended December 31, 2015, an increase of $1.1 million. The increase was driven by an increase in sales volume of our products, primarily the sale of T2Candida consumable diagnostic tests, driven from increased usage of consumable diagnostic tests in the installed base and growth in our installed T2Dx Instrument base, as well as international sales of the T2Dx Instruments, which was 14% of product revenue.

***Research revenue***

We recorded research revenue totaling $2.3 million for the year ended December 31, 2016, compared to $2.2 million for the year ended December 31, 2015, an increase of $0.1 million. The increase was driven by from activities performed pursuant to the research and development agreement with Canon US Life Sciences, partially offset by decreased revenue from research and development agreements utilizing T2MR technology with other third parties.

***Cost of product revenue***

During the year ended December 31, 2016, cost of product revenue associated with the sale of our T2Candida Panels and T2Dx Instruments to customers totaled $6.9 million, compared to $1.7 million for the year ended December 31, 2015, an increase of $5.1 million. The increase was due to continued expansion of manufacturing activities. Cost of product revenue for the year ended December 31, 2016 also included $2.4 million of cost to provide maintenance and technical support services to customers, approximately $1.3 million of costs not allocable to inventory, and $0.6 million of depreciation related to the T2Dx Instruments placed at customer locations pursuant to reagent rental agreements, as compared to $0.8 million, $0.1 million, and $0.1 million, respectively, for the year ended December 31, 2015.

***Research and development expenses***

Research and development expenses were $24.0 million for the year ended December 31, 2016, compared to $25.4 million for the year ended December 31, 2015, a decrease of approximately $1.4 million. The decrease was primarily due to decreased payroll, payroll-related and

subcontracted research and development expenses of $1.1 million, lower prototype development expenses of $0.4 million, lower travel costs of $0.1 million, and decreased other research and development costs of $0.8 million, which includes lower consulting, facility and lab expenses. Partially offsetting the decrease was an increase of $1.0 million in clinical expenses, primarily related to the T2Bacteria clinical trial.

***Selling, general and administrative expenses***

Selling, general and administrative expenses were $24.1 million for the year ended December 31, 2016, compared to $19.1 million for the year ended December 31, 2015. The increase of approximately $5.0 million was due primarily to increased payroll and related expenses of $3.4 million as we expanded our sales personnel, including $0.6 million of increased stock compensation expense, increased consulting, audit, public relations and patent fees of $0.8 million, increased travel expenses of $0.5 million related to increased sales personnel, increased other selling, general and administrative expenses of $0.2 million, and increased marketing program expenditures of $0.1 million.

***Interest expense, net***

Interest expense, net, was $4.1 million for the year ended December 31, 2016, compared to $2.0 million for the year ended December 31, 2015. Interest expense, net, increased by $2.1 million due to higher borrowing levels on our notes payable and a $0.9 million loss on extinguishment of debt resulting from our debt refinancing during the fourth quarter of 2016.

***Other income, net***

Other income, net, was $0.2 million for the year ended December 31, 2016, compared to $0.1 for the year ended December 31, 2015. Other income, net, increased $0.1 million due primarily to increased dividend and other investment income.

**Liquidity and Capital Resources**

We have incurred losses and cumulative negative cash flows from operations since our inception, and as of December 31, 2017, we had an accumulated deficit of $266.1 million. Having obtained clearance from the FDA and a CE mark in Europe to market the T2Dx and T2Candida, the Company has incurred significant commercialization expenses related to product sales, marketing, manufacturing and distribution. In addition, the Company anticipates costs and expenses may increase as the Company continues to develop other product candidates, improve existing products and maintain, expand and protect its intellectual property portfolio. The Company may seek to fund its operations through public equity or private equity or debt financings, as well as other sources. However, the Company may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. The Company's failure to raise capital or enter into such other arrangements if and when needed would have a negative impact on the Company's business, results of operations and financial condition and the Company's ability to develop and commercialize T2Dx, T2Candida, T2Bacteria, and other product candidates.

Historically, the Company has funded its operations primarily through its August 2014 initial public offering, its December 2015 confidentially marketed public offering ("CMPO"), its September 2016 private investment in public equity ("PIPE") financing, its September 2017 CMPO, private placements of redeemable convertible preferred stock and debt financing arrangements.

***Plan of operations and future funding requirements***

As of December 31, 2017 we had cash and cash equivalents of $41.8 million. Currently, our funds are primarily held in money market funds invested in U.S. government agency securities. Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, costs related to our products, clinical trials, laboratory and related supplies, supplies and materials used in manufacturing, legal and other regulatory expenses and general overhead costs.

Until such time as we can generate substantial product revenue, we expect to finance our cash needs, beyond what is currently available or on hand, through a combination of equity offerings, debt financings and revenue from existing and potential research and development and other collaboration agreements. If we raise additional funds in the future, we may need to relinquish valuable rights to our technologies, future revenue streams or grant licenses on terms that may not be favorable to us.

*Going Concern*

Our ability to continue operations after December 31, 2018 will depend on our ability to obtain additional funding, as to which no assurances can be given. These conditions raise substantial doubt about our ability to continue as a going concern. There can be no assurance that any financing by us can be realized, or if realized, what the terms of any such financing may be, or that any amount that we are able to raise will be adequate.

Management believes that the existing cash and cash equivalents at December 31, 2017, together with the additional remaining liquidity on our Term Loan Agreement of up to an additional $10.0 million, will be sufficient to fund our current operating plan through March 2019. The borrowing on the Term Loan Agreement is available at any time through September 27, 2018, and is subject to certain conditions including that we receive 510(k) clearance for the marketing of T2BacteriaTM by the FDA by June 30, 2018. Should our current operating plan not materialize Management's plans include raising additional funding, earning milestone payments pursuant the Company's Co- Development agreements,

delaying certain research projects and capital expenditures and eliminating certain future operating expenses in order to fund operations at reduced levels for the Company to continue as a going concern for a period of 12 months from the date the financial statements are issued. Management has concluded the likelihood that its plan to obtain sufficient funding from one or more of these sources or adequately reduce expenditures will be successful, while reasonably possible, is less than probable. The Term Loan Agreement also requires us to achieve certain annual revenue targets, whereby we are required to pay double the amount of any shortfall as an acceleration of principal payments, and maintain a minimum liquidity amount. Should we fall short of the revenue target we would seek a waiver of this provision. There can be no assurances that we would be successful in obtaining a waiver.

***Cash flows***

The following is a summary of cash flows for each of the periods set forth below:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| | (in thousands) | | |
| Net cash (used in) provided by: | | | |
| Operating activities | $ (47,718) | $ (46,442) | $ (37,465) |
| Investing activities | (2,476) | (5,487) | (7,894) |
| Financing activities | 18,505 | 51,755 | 45,172 |
| Net (decrease) increase in cash and cash equivalents | $ (31,689) | $ (174) | $ (187) |

***Net cash used in operating activities***

Net cash used in operating activities was $47.7 million for the year ended December 31, 2017, and consisted primarily of a net loss of $60.6 million adjusted for non-cash items including depreciation and amortization expense of $2.9 million, stock-based compensation expense of $4.8 million, non-cash interest expense of $2.7 million, change in fair value of a derivative instrument of $2.2 million and an impairment charge of $2.6 million, partially offset by deferred rent of $0.1 million and a net change in operating assets and liabilities of $0.1 million. The net change in operating assets and liabilities was primarily driven by a $0.7 million increase in deferred revenue, $0.3 million decrease in accounts payable, $0.1 increase in accounts receivable and $0.1 million increase in inventory, offset by an increase of $0.7 million in accrued expenses and other liabilities.

Net cash used in operating activities was $46.4 million for the year ended December 31, 2016, and consisted primarily of a net loss of $54.8 million adjusted for non-cash items including depreciation and amortization expense of $2.3 million, stock-based compensation expense of $4.8 million, a net change in operating assets and liabilities of $0.8 million, non-cash interest expense of $0.6 million and non-cash charge on extinguishment of debt of $0.1 million, partially offset by deferred rent of $0.3 million. The net change in operating assets and liabilities was primarily driven by a $0.3 million increase in deferred revenue and an increase of $0.5 million in accounts payable and accrued expenses related to growth in the business.

Net cash used in operating activities was $37.5 million for the year ended December 31, 2015, and consisted primarily of a net loss of $45.3 million adjusted for non-cash items including depreciation and amortization expense of $1.5 million, stock-based compensation expense of $4.2 million and non-cash interest expense of $0.4 million, partially offset by a net change in operating assets and liabilities of $2.0 million and deferred rent of $0.1 million. The net change in operating assets and liabilities was primarily driven by a $2.1 million increase in deferred revenue resulting from payment from our Co-Development Agreement with Canon US Life Sciences, an increase of $0.4 million in accounts payable and accrued expenses related to growth in the business, partially offset by purchases of inventory of $0.6 million and increased accounts receivable of $0.2 million related to research and product revenue.

***Net cash used in investing activities***

Net cash used in investing activities was $2.5 million for the year ended December 31, 2017, and consisted of $2.5 million of purchases of property and equipment, including $1.8 million of costs to purchase materials and manufacture T2 owned instruments and components and $0.7 million of purchases of lab equipment, manufacturing equipment and other property and equipment.

Net cash used in investing activities was $5.5 million for the year ended December 31, 2016, and consisted of $5.5 million of purchases of property and equipment, including $4.2 million of costs to purchase materials and manufacture T2 owned instruments and components and $1.3 million of purchases of lab equipment, manufacturing equipment and other property and equipment.

Net cash used in investing activities was $7.9 million for the year ended December 31, 2015, and consisted of $8.0 million of purchases of property and equipment, including $4.4 million of costs to purchase materials and manufacture T2 owned instruments and components, $2.6 million of leasehold improvements and $1.0 million of purchases of lab equipment, manufacturing equipment and other property and equipment. Partially offsetting these outflows was $0.1 million of proceeds from restricted cash accounts related to an operating lease agreement.

***Net cash provided by financing activities***

Net cash provided by financing activities was $18.5 million for the year ended December 31, 2017, and consisted of $18.6 million of net proceeds from our September 15, 2017 Confidentially Marketed Public Offering ("CMPO"), in which we sold 5,031,250 shares of common stock at the closing price of $4.00 per share and $1.1 million of proceeds from the exercise of stock options and sale of common stock under our 2014 Employee Stock Purchase Plan. Partially offsetting these sources of cash were $1.2 million of repayments of notes payable.

Net cash provided by financing activities was $51.8 million for the year ended December 31, 2016, and consisted of $39.7 million of net proceeds from our September 21, 2016 PIPE financing with Canon, in which we sold 6,055,341 shares of common stock at the closing price of $6.56 per share, $39.2 million of net proceeds from our December 30, 2016 term loan agreement with CRG Servicing LLC, $4.6 million of proceeds under the Facility with Essex, and $1.0 million of proceeds from the exercise of stock options and sale of common stock under our 2014 Employee Stock Purchase Plan. Partially offsetting these sources of cash were $32.4 million of repayments of notes payable and $0.4 million of payments of issuance costs from our December 2015 secondary offering.

Net cash provided by financing activities was $45.2 million for the year ended December 31, 2015, and consisted of $33.7 million of proceeds from the sale of common stock in a public offering, $10.0 million of proceeds from borrowing from our loan agreement with Solar Capital, Ltd., $1.8 million of proceeds from the issuance of common stock from our stock incentive plans, partially offset by repayments of notes payable of $0.3 million.

***Borrowing Arrangements***

*Term Loan Agreement*

In December 2016, the Company entered into a Term Loan Agreement (the "Term Loan Agreement") with CRG Servicing LLC ("CRG"). The Company initially borrowed $40.0 million pursuant to the Term Loan Agreement and may borrow up to an additional $10.0 million at any time through and including July 27, 2018, provided that, among other conditions, the Company receives 510(k) clearance for the marketing of T2BacteriaTM by the U.S. Food and Drug Administration ("FDA") on or before April 30, 2018 (the "Approval Milestone"). The Term Loan Agreement has a six-year term with three years (through December 30, 2019) of interest-only payments, which period shall be extended to four years (through December 30, 2020) if the Company achieves the Approval Milestone, after which quarterly principal and interest payments will be due through the December 30, 2022 maturity date. Interest on the amounts borrowed under the Term Loan Agreement accrues at an annual fixed rate of (a) prior to the Approval Milestone, 12.50%, 4.0% of which may be deferred during the interest-only period by adding such amount to the aggregate principal loan amount and (b) following the Approval Milestone, 11.50%, 3.5% of which may be deferred during the interest-only period by adding such amount to the aggregate principal loan amount. In addition, if the Company achieves certain financial performance metrics, the loan will convert to interest-only until the December 30, 2022 maturity, at which time all unpaid principal and accrued unpaid interest will be due and payable. The Company is required to pay CRG a financing fee based on the loan principal amount drawn. The Company is also required to pay a final payment fee of 8% of the principal outstanding upon repayment. In March 2018 the Term Loan Agreement was amended to extend the Approval Milestone to June 30, 2018, the additional $10.0 million funding through September 27, 2018 and reduce the fiscal year 2018 revenue target to $7.0 million.

The Company may prepay all or a portion of the outstanding principal and accrued unpaid interest under the Term Loan Agreement at any time upon prior notice subject to a certain prepayment fee during the first five years of the term and no prepayment fee thereafter. As security for its obligations under the Term Loan Agreement the Company entered into a security agreement with CRG whereby the Company granted a lien on substantially all of its assets, including intellectual property. The Loan Agreement also contains customary affirmative and negative covenants for a credit facility of this size and type. The Loan Agreement also requires the Company to achieve certain revenue targets, whereby the Company is required to pay double the amount of any shortfall as an acceleration of principal payments, and maintain a minimum liquidity amount. The Loan Agreement includes customary events of default that could result in the acceleration of the obligations under the Loan Agreement. Under certain circumstances, a default interest rate of an additional 4.00% per annum will apply at the election of CRG on all outstanding obligations during the occurrence and continuance of an event of default. The Term Loan Agreement is classified as a current liability on the balance sheet at December 31, 2017, based on the Company's consideration of the probability of violating a minimum liquidity covenant included in the Term Loan Agreement. On December 18, 2017, the Term Loan Agreement was amended and the 2017 minimum revenue target was reduced to $3.0 million from $5.0 million.

The Company assessed the terms and features, including the interest-only period dependent on the achievement of the Approval Milestone by April 30, 2018, and acceleration of the obligations under the Loan Agreement under an event of default, of the Term Loan Agreement in order to identify any potential embedded features that would require bifurcation. In addition, under certain circumstances, a default interest rate of an additional 4.0% per annum will apply at the election of CRG on all outstanding obligations during the occurrence and continuance of an event of default. The Company concluded that these features are not clearly and closely related to the host instrument, and represent a single compound derivative and is required to be re-measured at fair value on a quarterly basis.

During the fourth quarter of 2017, the Company received communication from the FDA that suggested the approval timeline of T2Bacteria would be longer than the Company initially anticipated. The delay resulted in an increase in the probability of not achieving the Approval Milestone by April 30, 2018, as well an increase in the probability of the payment of contingent interest in future periods, based on the contractual payments requirements that exist as of December 31, 2017. As such, in the fourth quarter, the Company recorded a derivative liability related to the Company's debt agreement with CRG of $2.2 million.

In December 2016, pursuant to the Term Loan Agreement, the Company made an initial draw of $39.2 million, net of financing fees. The Company used approximately $28.0 million of the initial proceeds to repay approximately $27.5 million of outstanding debt pursuant to the Loan and Security Agreement and to repay approximately $0.5 million of outstanding debt pursuant to the Promissory Note. Upon the repayment of all amounts owed by the Company under these agreements, all commitments were terminated and all security interests granted by the Company were released. The Company intends to retain the remainder of the initial net proceeds of approximately $11.2 million for general corporate purposes and working capital. As of December 31, 2017, we were in compliance with all covenants.

*Equipment Lease Credit Facility*

In October 2015, the Company signed the $10.0 million Credit Facility (the "Credit Facility") with Essex Capital Corporation ("Essex") to fund capital equipment needs. As one of the conditions of the Term Loan Agreement, the Credit Facility is capped at a maximum of $5.0 million. Under the Credit Facility, Essex will fund capital equipment purchases presented by the Company. The Company will repay the amounts borrowed in 36 equal monthly installments from the date of the amount funded. At the end of the 36 month lease term, the Company has the option to (a) repurchase the leased equipment at the lesser of fair market value or 10% of the original equipment value, (b) extend the applicable lease for a specified period of time, which will not be less than one year, or (c) return the leased equipment to the Lessor.

In April 2016 and June 2016, the Company completed the first two draws under the Credit Facility of $2.1 million and $2.5 million, respectively. The Company will make monthly payments of $67,000 under the first draw and $79,000 under the second draw. The borrowings under the Credit Facility are treated as capital leases. The amortization of the assets conveyed under the Credit Facility is included as a component of depreciation expense.

**Contractual Obligations and Contingent Liabilities**

The following summarizes our significant contractual obligations as of the date of issuance of this annual report on Form 10-K:

| | Payments Due by Fiscal Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | Total | 2018 | 2019-2020 | 2021-2022 | Thereafter |
| | | | (in thousands) | | |
| Operating leases (1) | $ 8,449 | $ 2,173 | $ 4,350 | $ 1,926 | $ — |
| Notes payable (2)(3)(4) | 68,322 | 67,266 | 1,056 | - | — |
| Total obligations | $ 76,771 | $ 69,439 | $ 5,406 | $ 1,926 | $ — |

(1) Represents the leases of approximately 62,800 square feet for office, laboratory and manufacturing space in Lexington and Wilmington, Massachusetts under noncancelable operating leases, which includes the lease amendment entered into on March 7, 2017 for office and laboratory space at our headquarters in Lexington, MA.

(2) Represents borrowing under our Term Loan Agreement, which currently bears interest at an annual rate of 12.5% and has principal repayment dates through September 2022, and our Credit Facility, which has principal repayment dates through May 2019. The balance for these debt instruments includes estimated interest payment obligations.

(3) This does not include prepayment penalties.

(4) The Term Loan Agreement with CRG is classified as a current liability on the balance sheet at December 31, 2017, based on the Company's consideration of the probability of violating a minimum liquidity covenant included in the Term Loan Agreement. The contractual terms of the agreement require payments of $3.5 million, $13.4 million and $48.6 million during the years ended December 31, 2018, 2019-2020 and 2021-2022, respectively.

**Contingent Liabilities and Commitments, Including Tax Matters**

We have net deferred tax assets of $77.7 million as of December 31, 2017, which have been fully offset by a valuation allowance due to uncertainties surrounding our ability to realize these tax benefits. The deferred tax assets are primarily composed of federal net operating loss ("NOL"), tax carryforwards and research and development tax credit carryforwards. As of December 31, 2017, we had federal NOL carryforwards of $229.1 million available to reduce future taxable income, if any. These federal NOL carryforwards are available to offset future taxable income, if any, through 2037. In general, if we experience, or have experienced, a greater than 50% aggregate change in ownership of certain significant stockholders over a three-year period, or a Section 382 ownership change, utilization of our pre-change NOL carryforwards are subject to an annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended. Such limitations may result in expiration of a portion of the NOL carryforwards before utilization and may be substantial. If we experience a Section 382 ownership change in connection as a result of future changes in our stock ownership, some of which changes are outside of our control, the tax benefits related to the NOL carryforwards may be limited or lost. We have not conducted an assessment to determine whether there may have been a Section 382 or 383 ownership change.

**Off-Balance Sheet Arrangements**

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

**Critical Accounting Policies and Significant Judgements**

This management's discussion and analysis of financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue and expenses during the reporting periods. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K, we believe that the following accounting policies are critical to the process of making significant judgments and estimates in the preparation of our financial statements and understanding and evaluating our reported financial results.

***Revenue Recognition***

We generate revenue from product sales, which includes the sale of instruments, consumable diagnostic tests and related services, and research and development agreements with third parties. Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collection is reasonably assured. If any of the revenue recognition criteria described have not been met, we defer revenue until such time each of the revenue recognition criteria have been satisfied.

Product revenue is generated by the sale of instruments and consumable diagnostic tests. We either directly sell instruments to customers and international distributors or retain title and place the instrument at the customer site pursuant to a reagent rental agreement. When the instrument is directly purchased by a customer, we recognize revenue when all applicable revenue recognition criteria are met. When the instrument is placed under a reagent rental agreement, our customers generally agree to fixed term agreements, which can be extended, minimum purchase commitments and/or pay an incremental charge on each consumable diagnostic test purchased, which varies based on the volume of test cartridges purchased. Revenue from the sale of consumable diagnostic tests, which includes the incremental charge, is generally recognized upon shipment as a component of product revenue in our consolidated statements of operations and comprehensive loss.

Direct sales of instruments include warranty, maintenance and technical support services for one year following the installation of a purchased instrument ("Maintenance Services"). After the completion of the initial Maintenance Services period, customers have the option to renew the Maintenance Services for additional one year periods in exchange for additional consideration. In addition, we may provide training to customers. We defer revenue from the initial sale of the instrument equal to the relative fair value of other deliverables, including one year of Maintenance Services, and recognize the amounts ratably over the service delivery period.

We warrant that consumable diagnostic tests will be free from defects, when handled according product specifications, for the stated life of the product. To fulfill valid warranty claims, we provide replacement product. Accordingly, we accrue warranty costs associated with the estimated defect rates of the consumable diagnostic tests.

We do not offer rights of return for instruments or consumable diagnostic tests.

For multiple-element arrangements, we identify the deliverables included within each agreement and evaluate which deliverables represent separate units of accounting. The determination that multiple elements in an arrangement meet the criteria for separate units of accounting requires us to exercise our judgment. We account for those components as separate elements when the following criteria are met: (1) the delivered items have value to the customer on a stand-alone basis; and, (2) if there is a general right of return relative to the delivered items, delivery or performance of the undelivered items is considered probable and within its control.

The consideration received is allocated among the separate units of accounting based on a selling price hierarchy. The selling price hierarchy is based on: (1) vendor specific objective evidence ("VSOE"), if available; (2) third party evidence of selling price if VSOE is not available; or (3) best estimated selling price ("BESP") if neither VSOE nor third party evidence is available. We generally expect that we will not be able to establish selling price using third-party evidence due to the nature of our products and the markets in which we compete, and, as such, we typically will determine selling price using VSOE or BESP.

When we establish selling price using BESP, consideration is given to both market and Company-specific factors, including the cost to produce the deliverable and the anticipated margin on that deliverable, as well as the characteristics of markets in which the deliverable is sold.

Revenue earned from activities performed pursuant to research and development agreements is reported as research revenue in the consolidated statements of operations and comprehensive loss, and is recognized using the proportional performance method as the work is completed, limited to payments earned, and the related costs are expensed as incurred as research and development expense. The timing of receipt of cash from our research and development agreements generally differs from when revenue is recognized.

***Stock-based compensation***

We issue stock-based awards to employees and non-employees, generally in the form of stock options and restricted stock awards. We account for our stock-based awards in accordance with FASB ASC Topic 718, *Compensation — Stock Compensation*, or ASC 718. ASC 718 requires all stock-based payments to employees, including grants of employee stock options and modifications to existing stock options, to be recognized in the consolidated statements of operations and comprehensive loss based on their grant date fair values. We account for stock-based awards to non-employees in accordance with FASB ASC Topic 505-50, *Equity-Based Payments to Non-Employees*, which requires the fair value of the award to be remeasured at fair value as the award vests. We recognize the compensation cost of stock-based awards to employees and non-employees on a straight-line basis over the vesting period. See below for a detailed description of how we estimate fair value for purposes of option grants and the methodology used in measuring stock-based compensation expense.

We estimate the fair value of our stock-based awards to employees and non-employees using the Black-Scholes-Merton option pricing model, which requires the input of highly subjective assumptions, including (a) the expected volatility of our stock, (b) the expected term of the award, (c) the risk-free interest rate and (d) expected dividends. Due to the lack of company specific historical and implied volatility data resulting from our limited public market trading history, we have based our estimate of expected volatility primarily on the historical volatility of a group of similar companies that are publicly traded. For these analyses, we have selected companies with comparable characteristics to ours, including enterprise value, risk profiles and position within the industry, and with historical share price information sufficient to meet the expected life of the stock-based awards. We compute the historical volatility data using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of our stock-based awards. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available. We have estimated the expected life of our employee stock options using the "simplified" method, whereby the expected life equals the average of the vesting term and the original contractual term of the option. The risk-free interest rates for periods within the expected life of the option are based on the U.S. Treasury yield curve in effect during the period in which the options were granted.

We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. Stock-based compensation expense recognized in the financial statements is based on awards that are ultimately expected to vest. If our actual forfeiture rate is materially different from the estimate, our stock-based compensation expense could be different from what we have recorded in the current period.

These assumptions used to determine stock compensation expense represent our best estimates, but the estimates involve inherent uncertainties and the application of our judgment. As a result, if factors change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different.

***Inventories***

Inventories are stated at the lower of cost or net realizable value. The Company determines the cost of its inventories, which includes amounts related to materials, direct labor, and manufacturing overhead, on a first-in, first-out basis. We perform an assessment of the recoverability of capitalized inventory during each reporting period, and writes down any excess and obsolete inventories to their realizable value in the period in which the impairment is first identified. Shipping and handling costs incurred for inventory purchases are capitalized and recorded upon sale in cost of product revenues in the consolidated statements of operations and comprehensive loss or are included in the value of T2-owned instruments and components, a component of property and equipment, net, and depreciated.

We capitalize inventories in preparation for sales of products when the related product candidates are considered to have a high likelihood of regulatory clearance, which for the T2Dx Instrument and T2Candida Panel was upon the achievement of regulatory clearance, and the related costs are expected to be recoverable through sales of the inventories. In addition, the Company capitalizes inventories related to the manufacture of instruments that have a high likelihood of regulatory clearance, which for the T2Dx Instrument was upon the achievement of regulatory clearance, and will be retained as the Company's assets, upon determination that the instrument has alternative future uses. In determining whether or not to capitalize such inventories, the Company evaluates, among other factors, information regarding the product candidate's status of regulatory submissions and communications with regulatory authorities, the outlook for commercial sales and alternative future uses of the product candidate. Costs associated with development products prior to satisfying the inventory capitalization criteria are charged to research and development expense as incurred.

We classify inventories related to instruments that are Company-owned, as a component of property and equipment. Raw material and work-in-process inventories that are expected to be used to produce Company-owned instruments, based on our business model and forecast, are also classified as property and equipment. Company-owned instruments are instruments that are manufactured and placed with customers in connections with rental agreements, or are used for internal purposes.

***Income Taxes***

During 2017 we recorded no income tax benefit due to the full valuation allowance recorded against the Company's deferred tax assets. The Tax Cuts and Jobs Act reduced the federal tax rate from 35% to 21% and we re-measured certain deferred tax assets and liabilities based on the rates at which they are anticipated to reverse in the future. The provisional amount recorded related to the re-measurement of our deferred tax balance was a tax expense of $32.9 million which was offset by an adjustment to the valuation allowance against our deferred taxes of $32.9 million.

During 2016 and 2015 we recorded no income tax benefit due to the full valuation allowance recorded against the Company's deferred tax assets.

***Impairment of Long Lived Assets***

We review long‑lived assets, including capitalized T2 owned instruments and components, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If indications of impairment exist, projected future undiscounted cash flows associated with the asset or asset group are compared to the carrying amount to determine whether the asset's value is recoverable. During this review, we reevaluate the significant assumptions used in determining the original cost and estimated lives of long‑lived assets. Although the assumptions may vary from asset to asset, they generally include operating results, changes in the use of the asset, cash flows and other indicators of value. Management then determines whether the remaining useful life continues to be appropriate or whether there has been an impairment of long‑lived assets based primarily upon whether expected future undiscounted cash flows are sufficient to support the assets' recovery. If impairment exists, we would adjust the carrying value of the asset to fair value, generally determined by a discounted cash flow analysis. If the carrying value of the asset exceeds such projected undiscounted cash flows, the asset will be written down to its estimated fair value. We recorded an impairment expense of $2.6 million during the year ended December 31, 2017.

***Fair Value of Derivative***

Our Term Loan Agreement with CRG contains certain provisions that change the underlying cash flows of the instrument, including an interest-only period dependent on the achievement of the Approval Milestone by April 30, 2018, and acceleration of the obligations under the Loan Agreement under an event of default. In addition, under certain circumstances, a default interest rate of an additional 4.0% per annum will apply at the election of CRG on all outstanding obligations during the occurrence and continuance of an event of default. We concluded that these features are not clearly and closely related to the host instrument, and represent a single compound derivative and is required to be re-measured at fair value on a quarterly basis.

During the fourth quarter of 2017, we received communication from the FDA that suggested the approval timeline of T2Bacteria might be longer than we initially anticipated. The delay resulted in an increase in the probability of not achieving the Approval Milestone by April 30, 2018, as well an increase in the probability of the payment of contingent interest in future periods, based on the contractual payments requirements that exist as of December 31, 2017. As such, in the fourth quarter, we recorded a derivative liability related to the Company's debt agreement with CRG of $2.2 million. The estimated fair value of the derivative liability was determined using a probability-weighted discounted cash flow model that includes principal and interest payments under the following scenarios: FDA approval by April 30, 2017 (40%), FDA approval after April 30, 2017 (20%) and no FDA approval (40%). Should our assessment of these probabilities change, including amendments of projected revenue targets, there could be a change to the fair value of the derivative liability.

**Recent Accounting Standards**

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies and adopted by us as of the specified effective date. Unless otherwise discussed we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

*Accounting Standards Adopted*

In July 2015, the FASB issued ASU No. 2015-11, Inventory (Topic 330): Simplifying the Measurement of Inventory ("ASU 2015-11"). The standard simplifies the subsequent measurement of inventory by requiring inventory to be measured at the lower of cost and net realizable value for entities using the first-in-first out method of valuing inventory. ASU 2015-11 eliminates other measures required by current guidance to determine net realizable value. ASU 2015-11 is effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years and early adoption is permitted. The Company's adoption of this standard did not have a material effect on its consolidated financial statements.

In March 2016, the FASB released ASU No. 2016-09 Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09") which is intended to simplify income tax accounting for excess tax benefits, accounting for forfeitures, and employer statutory withholding. Under the current guidance, excess tax benefits that result from an award vesting or settling are recognized in additional paid-in capital in the

period that they reduce cash taxes payable. This requires the provision to be computed on a with and without option basis and may result in net operating loss and credit carryforwards on the balance sheet being less than what is available on the tax return. Under the new guidance, the income tax effects of awards will be recognized as a component of income tax expense when the awards vest or are settled (regardless if cash taxes are reduced). For interim reporting purposes, companies will account for excess tax benefits and tax deficiencies as discrete items in the period during which they occurred. The guidance is effective for public entities for fiscal years beginning after December 15, 2016, and interim periods within those years. Early adoption is permitted, however all of the guidance included in the update must be applied when adopted. The Company must use a modified retrospective transition method for adopting and record the cumulative effect of all unrecognized benefits and any change in valuation allowances at the end of the prior tax period as an adjustment to retained earnings. The Company's adoption of this standard did not have a material effect on its consolidated financial statements and prior periods have not been adjusted. As a result, the Company established a net operating loss deferred tax asset of $1.2 million to account for prior period excess tax benefits through retained earnings, however an offsetting valuation allowance of $1.2 million will also be established through retained earnings because it is not more likely than not that the deferred tax asset will be realized due to historical and expected future losses, such that there is no impact on the Company's consolidated financial statements. The Company also elected to maintain the use of estimated forfeitures in the calculation of stock based compensation.

In March 2016, the FASB issued ASU No. 2016-06, Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments ("ASU 2016-06"), which applies to all issuers of or investors in debt instruments with embedded call or put options. ASU 2016-06 clarifies the requirements for assessing whether contingent call or put options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. Entities performing the assessment under the guidance of ASU 2016-06 are required to assess the embedded call or put options solely in accordance with the four-step decision process. In addition, ASU 2016-06 clarifies what steps are required when assessing whether the economic characteristics and risks of call or put options are clearly and closely related to the economic characteristics and risks of their debt hosts. ASU 2016-06 is effective for financial statements issued for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years using the modified retrospective method for existing debt instruments. The Company's adoption of this standard did not have a material effect on its consolidated financial statements.

*Accounting Standards Issued, Not Adopted*

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASC 2016-15"), which provides guidance on the classification of certain specific cash flow issues including debt prepayment or extinguishment costs, settlement of certain debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of certain insurance claims and distributions received from equity method investees. The standard requires the use of a retrospective approach to all periods presented, but may be applied prospectively if retrospective application would be impracticable. The guidance is effective for public entities for fiscal years beginning after December 15, 2017, and interim periods within those years, and early application is permitted. The Company is currently evaluating the impact of its pending adoption of ASU 2016-15 on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases ("ASU 2016-02"), which applies to all leases. Under ASU 2016-02, a right-of-use asset and lease obligation will be recorded for all leases, whether operating or financing leases, while the statement of operations will reflect lease expense for operating leases and amortization and interest expense for financing leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 and interim periods within those years, which is the year ended December 31, 2019 for the Company. Entities are required to use a modified retrospective approach of adoption for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. The Company is evaluating the new guidance and the expected effect on the Company's consolidated financial statements.

In June 2014, the FASB issued amended guidance, ASU No. 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"), which is applicable to revenue recognition that will be effective for the Company for the year ending December 31, 2018, as a result of the deferral of the effective date adopted by the FASB in July 2015. The new guidance must be adopted using either a full retrospective approach for all periods presented or a modified retrospective approach. Early adoption prior to the original adoption date (annual reporting periods beginning after December 15, 2016) of ASU 2014-09 is not permitted. The new guidance applies a more principles-based approach to revenue recognition. The Company will adopt the new standard, effective January 1, 2018, under the modified retrospective method.

The Company established an implementation team to assess the potential impacts of the new standard and prepare for adoption. The implementation team has reviewed current accounting policies and practices and identified potential differences resulting from the application of the new standard. Findings and progress of the project have been regularly communicated to the Audit Committee and senior management.

The qualitative assessment of the standard provided below are estimates of the expected effects of the adoption of ASC 606. This represents our best estimate of the effects of adopting ASC 606 at the time of the preparation of this Annual Report on Form 10-K. The actual impact of ASC 606 is subject to change from these estimates and such change may be significant, pending the completion of our assessment in the first quarter of 2018.

The implementation team is in the process of completing an analysis of our revenue generating arrangements, including direct sales of instruments and consumables, sales of instruments and consumables to distributors, reagent rental agreements and research agreements. A detailed policy for each revenue stream has been drafted. The Company is in the process of implementing appropriate changes to controls, processes, and systems to support recognition and disclosure under the new standard. In addition, the Company continues to monitor changes, modifications, clarifications or interpretations, which may impact the results of adoption, undertaken by the FASB.

The impact of adopting the new standard is not expected to be material to 2017 and 2016 revenue. The most significant impacts of the new standard, upon adoption, are expected to be around the timing of revenue recognition. Specifically, under the new standard:

- Consideration allocated to the instrument in a direct sale will be recognized upon shipment and consideration allocated to installation will be recognized upon installation. Currently, revenue recognition for both obligations occurs upon installation.
- Revenue recognition on sales to distributors may be accelerated based on management's judgement regarding use of the sell-in or sell-through method. Currently, the Company recognizes revenue with new distributors based on the sell-through method, which requires deferral of revenue until product is sold to an end customer.

The Company does not expect the adoption of the new standard to a have material impact on our consolidated balance sheet. The Company does expect significant changes to its financial statement disclosures.

**Emerging Growth Company Status**

In April 2012, the Jumpstart Our Business Startups Act, or the JOBS Act, was enacted in the United States. Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act, as amended, for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies.

## Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk related to changes in interest rates. As of December 31, 2017, we had cash and cash equivalents of $41.8 million held primarily in money market funds consisting of U.S. government agency securities. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term securities. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate one percent change in interest rates would not have a material effect on the fair market value of our portfolio. As of December 31, 2017, we had no outstanding debt exposed to variable interest rates.

## Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### Report of Independent Registered Public Accounting Firm

The Stockholders and the Board of Directors of T2 Biosystems, Inc.

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of T2 Biosystems, Inc. (the Company) as of December 31, 2017 and 2016, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

**The Company's Ability to Continue as a Going Concern**

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations, will require additional capital to fund its current operating plan, and has stated that substantial doubt exists about the Company's ability to continue as a going concern. In addition, the Company has classified certain debt obligations with long-term contractual maturities as current liabilities due to likely future debt covenant violations. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1. The 2017 consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

**Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on 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/ Ernst & Young LLP

We have served as the Company's auditor since 2008
Boston, Massachusetts
March 19, 2018

**T2 Biosystems, Inc.**
**Consolidated Balance Sheets**
**(In thousands, except share and per share data)**

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 41,799 | $ 73,488 |
| Accounts receivable | 467 | 327 |
| Prepaid expenses and other current assets | 708 | 820 |
| Inventories | 1,344 | 803 |
| Total current assets | 44,318 | 75,438 |
| Property and equipment, net | 10,015 | 13,589 |
| Restricted cash | 260 | 260 |
| Other assets | 268 | 281 |
| Total assets | $ 54,861 | $ 89,568 |
| **Liabilities and stockholders' equity** | | |
| Current liabilities: | | |
| Accounts payable | $ 648 | $ 962 |
| Accrued expenses and other current liabilities | 6,218 | 4,908 |
| Derivative liability | 2,238 | — |
| Notes payable | 40,696 | 1,269 |
| Deferred revenue | 1,736 | 2,445 |
| Current portion of lease incentives | 246 | 301 |
| Total current liabilities | 51,782 | 9,885 |
| Notes payable, net of current portion | 1,008 | 39,504 |
| Lease incentives, net of current portion | 731 | 792 |
| Other liabilities | — | 49 |
| Commitments and contingencies (see Note 12) | | |
| Stockholders' equity: | | |
| Preferred stock, $0.001 par value; 10,000,000 shares authorized; no shares issued and outstanding | — | — |
| Common stock, $0.001 par value; 200,000,000 shares authorized; 35,948,900 and 30,482,712 shares issued and outstanding at December 31, 2017 and December 31, 2016, respectively | 36 | 30 |
| Additional paid-in capital | 267,421 | 242,997 |
| Accumulated deficit | (266,117) | (203,689) |
| Total stockholders' equity | 1,340 | 39,338 |
| Total liabilities and stockholders' equity | $ 54,861 | $ 89,568 |

See accompanying notes to financial statements.

**T2 Biosystems, Inc.**
**Consolidated Statements of Operations and Comprehensive Loss**
**(In thousands, except share and per share data)**

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Revenue: | | | |
| Product revenue | $ 3,440 | $ 1,747 | $ 599 |
| Research revenue | 1,226 | 2,333 | 2,214 |
| Total revenue | 4,666 | 4,080 | 2,813 |
| Costs and expenses: | | | |
| Cost of product revenue | 12,028 | 6,872 | 1,740 |
| Research and development | 23,733 | 24,009 | 25,362 |
| Selling, general and administrative | 22,757 | 24,077 | 19,094 |
| Total costs and expenses | 58,518 | 54,958 | 46,196 |
| Loss from operations | (53,852) | (50,878) | (43,383) |
| Interest expense, net | (8,907) | (4,098) | (1,967) |
| Other income, net | 331 | 172 | 60 |
| Net loss and comprehensive loss | (62,428) | (54,804) | (45,290) |
| Net loss per share — basic and diluted | $ (1.94) | $ (2.11) | $ (2.21) |
| Weighted-average number of common shares used in computing net loss per share — basic and diluted | 32,131,512 | 26,015,751 | 20,501,748 |

See accompanying notes to financial statements.

**T2 Biosystems, Inc.**
**Consolidated Statements of Stockholders' Equity**
**(In thousands, except share and per share data)**

| | Common Stock | | Additional Paid-In | Accumulated | Total Stockholders' |
|---|---|---|---|---|---|
| | Shares | Amount | Capital | Deficit | Equity |
| Balance at December 31, 2014 | 20,041,645 | $ 20 | $ 156,576 | $ (103,595) | $ 53,001 |
| Stock-based compensation expense | — | — | 4,168 | — | 4,168 |
| Issuance of common stock from secondary public offering, net of offering costs of $2,732 | 3,691,049 | 4 | 33,252 | — | 33,256 |
| Issuance of common stock from exercise of stock options and employee stock purchase plan | 442,687 | — | 1,804 | — | 1,804 |
| Net loss | — | — | — | (45,290) | (45,290) |
| Balance at December 31, 2015 | 24,175,381 | 24 | 195,800 | (148,885) | 46,939 |
| Stock-based compensation expense | — | — | 4,848 | — | 4,848 |
| Offering costs on issuance of common stock from secondary public offering | — | — | (215) | — | (215) |
| Issuance of common stock from exercise of stock options and employee stock purchase plan | 251,990 | — | 1,018 | — | 1,018 |
| Issuance of common stock for private investment | 6,055,341 | 6 | 39,717 | — | 39,723 |
| Issuance of warrants | — | — | 1,829 | — | 1,829 |
| Net loss | — | — | — | (54,804) | (54,804) |
| Balance at December 31, 2016 | 30,482,712 | 30 | 242,997 | (203,689) | 39,338 |
| Stock-based compensation expense | — | — | 4,790 | — | 4,790 |
| Issuance of common stock from vesting of restricted stock, exercise of stock options and employee stock purchase plan | 434,938 | 1 | 1,058 | — | 1,059 |
| Issuance of common stock from secondary public offering, net of offering costs of $252 | 5,031,250 | 5 | 18,576 | — | 18,581 |
| Net loss | — | — | — | (62,428) | (62,428) |
| Balance at December 31, 2017 | 35,948,900 | $ 36 | $ 267,421 | $ (266,117) | $ 1,340 |

See accompanying notes to financial statements.

**T2 Biosystems, Inc.**
**Consolidated Statements of Cash Flows**
**(In thousands)**

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| **Operating activities** | | | |
| Net loss | $ (62,428) | $ (54,804) | $ (45,290) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | |
| Depreciation and amortization | 2,940 | 2,280 | 1,465 |
| Stock-based compensation expense | 4,790 | 4,848 | 4,168 |
| Noncash interest expense | 2,710 | 564 | 354 |
| Loss on extinguishment of debt | — | 112 | — |
| Impairment of T2 owned instruments and components | 2,571 | — | — |
| Change in fair value of derivative instrument | 2,238 | — | — |
| Deferred rent | (115) | (250) | (119) |
| Changes in operating assets and liabilities: | | | |
| Accounts receivable | (140) | 42 | (168) |
| Prepaid expenses and other assets | 125 | 68 | 190 |
| Inventories, net | (110) | (120) | (568) |
| Accounts payable | (314) | (61) | 177 |
| Accrued expenses and other liabilities | 724 | 580 | 260 |
| Deferred revenue | (709) | 299 | 2,066 |
| Net cash used in operating activities | (47,718) | (46,442) | (37,465) |
| **Investing activities** | | | |
| Purchases and manufacture of property and equipment | (2,476) | (5,487) | (7,974) |
| Decrease in restricted cash | — | — | 80 |
| Net cash used in investing activities | (2,476) | (5,487) | (7,894) |
| **Financing activities** | | | |
| Proceeds from issuance of common stock in public offering, net of offering costs | 18,640 | (385) | 33,677 |
| Proceeds from issuance of common stock and stock options exercises, net | 1,059 | 1,018 | 1,804 |
| Proceeds from private investment in public equity | — | 39,723 | — |
| Proceeds from notes payable, net of issuance costs | — | 43,803 | 10,000 |
| Repayments of note payable | (1,194) | (32,404) | (309) |
| Net cash provided by financing activities | 18,505 | 51,755 | 45,172 |
| Net decrease in cash and cash equivalents | (31,689) | (174) | (187) |
| Cash and cash equivalents at beginning of period | 73,488 | 73,662 | 73,849 |
| Cash and cash equivalents at end of period | $ 41,799 | $ 73,488 | $ 73,662 |

See accompanying notes to financial statements.

**T2 Biosystems, Inc.**
**Consolidated Statements of Cash Flows (Continued)**
**(In thousands)**

| | Year ended December 31, | | |
|---|---|---|---|
| | **2017** | **2016** | **2015** |
| **Supplemental disclosures of cash flow information** | | | |
| Cash paid for interest | $ 3,959 | $ 2,732 | $ 1,506 |
| **Supplemental disclosures of noncash activities** | | | |
| Accrued property and equipment | $ 189 | $ 82 | $ 247 |
| Transfer from T2 owned equipment to inventory | $ 431 | $ — | $ — |
| Leasehold improvements paid by landlord | $ — | $ — | $ 1,268 |
| Transfer from other liabilities to accrued expenses and other current liabilities | $ 585 | $ — | $ — |
| Public offering costs unpaid at year end | $ 59 | $ — | $ 420 |

See accompanying notes to financial statements.

**1. Nature of Business**

T2 Biosystems, Inc. (the "Company") was incorporated on April 27, 2006 as a Delaware corporation with operations based in Lexington, Massachusetts. The Company is an *in vitro* diagnostics company that has developed an innovative and proprietary technology platform that offers a rapid, sensitive and simple alternative to existing diagnostic methodologies. The Company is using its T2 Magnetic Resonance technology, or T2MR, to develop a broad set of applications aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier. T2MR enables rapid detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, plasma, serum, saliva, sputum and urine, and can detect cellular targets at limits of detection as low as one colony forming unit per milliliter, or CFU/mL. The Company's initial development efforts target sepsis and Lyme disease, which are areas of significant unmet medical need in which existing therapies could be more effective with improved diagnostics. On September 22, 2014, the Company received market clearance from the U.S. Food and Drug Administration ("FDA") for its first two products, the T2Dx Instrument (the "T2Dx") and T2Candida Panel ("T2Candida"). On June 30, 2017, the Company received a CE Mark for its T2Bacteria Panel ("T2Bacteria"). On September 8, 2017, the Company filed a 510(k) premarket submission for the T2Bacteria Panel with the U.S. Food and Drug Administration (FDA).

The Company has devoted substantially all of its efforts to research and development, business planning, recruiting management and technical staff, acquiring operating assets, raising capital, and, most recently, the commercialization and improvement of its existing products.

**Liquidity and Going Concern**

At December 31, 2017, the Company has cash and cash equivalents of $41.8 million and an accumulated deficit of $266.1 million. The future success of the Company is dependent on its ability to successfully commercialize its products, obtain regulatory clearance for and successfully launch its future product candidates, obtain additional capital and ultimately attain profitable operations. Historically, the Company has funded its operations primarily through its August 2014 initial public offering, its December 2015 confidentially marketed public offering ("CMPO"), its September 2016 private investment in public equity ("PIPE") financing, its September 2017 CMPO, private placements of redeemable convertible preferred stock and debt financing arrangements.

The Company is subject to a number of risks similar to other newly commercial life science companies, including, but not limited to commercially launching the Company's products, development and market acceptance of the Company's product candidates, development by its competitors of new technological innovations, protection of proprietary technology, and raising additional capital.

Having obtained clearance from the FDA and a CE mark in Europe to market the T2Dx and T2Candida, the Company has incurred significant commercialization expenses related to product sales, marketing, manufacturing and distribution. In addition, the Company anticipates costs and expenses to increase as the Company continues to develop other product candidates, improve existing products and maintain, expand and protect its intellectual property portfolio. The Company may seek to fund its operations through public equity or private equity or debt financings, as well as other sources. However, the Company may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. The Company's failure to raise capital or enter into such other arrangements if and when needed would have a negative impact on the Company's business, results of operations and financial condition and the Company's ability to develop and commercialize T2Dx, T2Candida, T2Bacteria, and other product candidates.

Pursuant to the requirements of Accounting Standards Codification (ASC) 205-40, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, management must evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. This evaluation initially does not take into consideration the potential mitigating effect of management's plans that have not been fully implemented as of the date the financial statements are issued. When substantial doubt exists under this methodology, management evaluates whether the mitigating effect of its plans sufficiently alleviates substantial doubt about the Company's ability to continue as a going concern. The mitigating effect of management's plans, however, is only considered if both (1) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (2) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued.

Management believes that its existing cash and cash equivalents at December 31, 2017, together with funding available under the Term Loan Agreement, will be sufficient to allow the Company to fund its current operating plan through March 2019. However, as certain elements of the Company's operating plan are outside of the Company's control, including the approval of the Company's T2Bacteria Panel and receipt of certain development and regulatory milestone payments under the Company's Co-Development agreements, they cannot be considered probable. Under ASC 205-40, the future receipt of potential funding from the Company's Co-Development partners and other resources cannot be considered probable at this time because none of the plans are entirely within the Company's control. In addition, the Company is required to maintain a minimum cash balance under its Term Loan Agreement with CRG Servicing LLC ("CRG") (Note 6).

These conditions raise substantial doubt regarding the Company's ability to continue as a going concern for a period of one year after the date that the financial statements are issued. Management's plans to alleviate the conditions that raise substantial doubt include raising additional funding, earning milestone payments pursuant the Company's Co- Development agreements, delaying certain research projects and capital expenditures and eliminating certain future operating expenses in order to fund operations at reduced levels for the Company to continue as a going concern for a period of 12 months from the date the financial statements are issued. Management has concluded the likelihood that its plan to obtain sufficient funding from one or more of these sources or adequately reduce expenditures will be successful, while reasonably possible, is less than probable. Accordingly, the Company has concluded that substantial doubt exists about the Company's ability to continue as a going concern for a period of at least twelve months from the date of issuance of these consolidated financial statements.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

**2. Summary of Significant Accounting Policies**

**Basis of Presentation and Consolidation**

The Company's financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB"). The Company's consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, T2 Biosystems Securities Corporation. All intercompany balances and transactions have been eliminated.

**Use of Estimates**

The preparation of the Company's consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company utilizes certain estimates in the determination of the fair value of its stock options, deferred tax valuation allowances, revenue recognition, to record expenses relating to research and development contracts, accrued expenses, the fair value of a derivative liability and to classify the value of instrument raw material and work-in-process inventory between inventory and property and equipment. The Company bases its estimates on historical experience and other market-specific or other relevant assumptions that it believes to be reasonable under the circumstances. Actual results could differ from such estimates.

**Segment Information**

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the Chief Executive Officer. The Company views its operations and manages its business in one operating segment, which is the business of developing and, upon regulatory clearance, launching commercially its diagnostic products aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier.

**Off-Balance Sheet Risk and Concentrations of Credit Risk**

The Company has no significant off-balance sheet risks, such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Cash and cash equivalents are financial instruments that potentially subject the Company to concentrations of credit risk. At December 31, 2017 and 2016, substantially all of the Company's cash was deposited in accounts at one financial institution, with a significant amount invested in money market funds that are invested in short-term U.S. government agency securities. The Company maintains its cash deposits, which at times may exceed the federally insured limits, with a large financial institution and, accordingly, the Company believes such funds are subject to minimal credit risk.

For the year ended December 31, 2017, the Company derived approximately 19% of its total revenue from one customer and 10% of its total revenue from a second customer. For the year ended December 31, 2016, the Company derived approximately 45% of its total revenue from one customer and 10% of its total revenue from a second customer. For the year ended December 31, 2015, the Company derived approximately 50% of its total revenue from one customer and 25% of its total revenue from a second customer.

**Cash Equivalents**

Cash equivalents include all highly liquid investments maturing within 90 days from the date of purchase. Cash equivalents consist of money market funds invested in short-term U.S. government agency securities as of December 31, 2017 and 2016.

**Accounts Receivable**

The Company's accounts receivable consists of amounts due from commercial customers and from research and development arrangements with partners. At each reporting period, management reviews all outstanding balances to determine if the facts and circumstances of each customer relationship indicate the need for a reserve. The Company does not require collateral and did not have an allowance for doubtful accounts at December 31, 2017 or 2016.

**Inventories**

Inventories are stated at the lower of cost or net realizable value. The Company determines the cost of its inventories, which includes amounts related to materials, direct labor, and manufacturing overhead, on a first-in, first-out basis. The Company performs an assessment of the recoverability of capitalized inventory during each reporting period, and writes down any excess and obsolete inventories to their realizable value in the period in which the impairment is first identified. Shipping and handling costs incurred for inventory purchases are capitalized and recorded upon sale in cost of product revenues in the consolidated statements of operations and comprehensive loss or are included in the value of T2-owned instruments and components, a component of property and equipment, net, and depreciated.

The Company capitalizes inventories in preparation for sales of products when the related product candidates are considered to have a high likelihood of regulatory clearance, which for the T2Dx Instrument and T2Candida Panel was upon the achievement of regulatory clearance, and the related costs are expected to be recoverable through sales of the inventories. In addition, the Company capitalizes inventories related to the manufacture of instruments that have a high likelihood of regulatory clearance, which for the T2Dx Instrument was upon the achievement of regulatory clearance, and will be retained as the Company's assets, upon determination that the instrument has alternative future uses. In determining whether or not to capitalize such inventories, the Company evaluates, among other factors, information regarding the product candidate's status of regulatory submissions and communications with regulatory authorities, the outlook for commercial sales and alternative future uses of the product candidate. Costs associated with development products prior to satisfying the inventory capitalization criteria are charged to research and development expense as incurred.

The Company classifies instruments that are Company-owned, as a component of property and equipment. Raw material and work-in-process inventories that are expected to be used to produce Company-owned instruments, based on our business model and forecast, are also classified as property and equipment. Company-owned instruments are instruments that are manufactured and placed with customers in connection with reagent rental agreements, or are used for internal purposes.

The components of inventory consist of the following (in thousands):

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| Raw materials | $ 539 | $ 389 |
| Work-in-process | 562 | 351 |
| Finished goods | 243 | 63 |
| Total inventories, net | $ 1,344 | $ 803 |

**Fair Value Measurements**

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. ASC 820, *Fair Value Measurements and Disclosures* ("ASC 820"), establishes a hierarchy of inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available.

Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1 — Quoted unadjusted prices for identical instruments in active markets.

Level 2 — Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model‑derived valuations in which all observable inputs and significant value drivers are observable in active markets.

Level 3 — Model derived valuations in which one or more significant inputs or significant value drivers are unobservable, including assumptions developed by the Company.

The fair value hierarchy prioritizes valuation inputs based on the observable nature of those inputs. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment

of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability (Note 3).

For certain financial instruments, including accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses, the carrying amounts approximate their fair values as of December 31, 2017 and 2016 because of their short-term nature. At December 31, 2017 and 2016, the carrying value of the Company's debt approximated fair value, which was determined using Level 3 inputs, using market quotes from brokers and is based on current rates offered for similar debt (Note 6).

**Property and Equipment**

Property and equipment are recorded at cost and depreciated over their estimated useful lives using the straight-line method. Property and equipment includes raw materials, work-in-process and finished instruments that are Company-owned or expected to remain Company-owned when placed in service. Company-owned instruments are instruments that are manufactured and placed with customers in connection with reagent rental agreements, or are used for internal purposes. Repairs and maintenance costs are expensed as incurred, whereas major improvements are capitalized as additions to property and equipment.

**Revenue Recognition**

The Company generates revenue from product sales, which includes the sale of instruments, consumable diagnostic tests and related services, and research and development agreements with third parties. The Company recognizes revenue in accordance with FASB ASC Topic 605, *Revenue Recognition* ("ASC 605"). Accordingly, the Company recognizes revenue when all of the following criteria have been met:

i. Persuasive evidence of an arrangement exists

ii. Delivery has occurred or services have been rendered

iii. The seller's price to the buyer is fixed or determinable

iv. Collectability is reasonably assured

If any of the above criteria have not been met, the Company defers revenue until such time each of the criteria have been satisfied.

Product revenue is generated by the sale of instruments and consumable diagnostic tests predominantly through its direct sales force in the United States, and distributors in geographic regions outside the United States. The Company does not offer product return or exchange rights (other than those relating to defective goods under warranty) or price protection allowances to its customers, including its distributors. Payment terms granted to distributors are the same as those granted to end-user customers and payments are not dependent upon the distributors' receipt of payment from their end-user customers. The Company either sells instruments to customers and international distributors, or retains title and places the instrument at the customer site pursuant to a reagent rental agreement. When the instrument is directly purchased by a customer, the Company recognizes revenue when all applicable revenue recognition criteria are met. When the instrument is placed under a reagent rental agreement, the Company's customers generally agree to fixed term agreements, which can be extended, certain of which may include minimum purchase commitments and/or incremental charges on each consumable diagnostic test purchased, which varies based on the volume of test cartridges purchased. Revenue from the sale of consumable diagnostic tests, which includes the incremental charge, is recognized upon delivery as a component of product revenue in the Company's consolidated statements of operations and comprehensive loss.

Direct sales of instruments to U.S. customers include warranty, maintenance and technical support services for one year following the installation of the purchased instrument ("Maintenance Services"). After the completion of the initial Maintenance Services period, customers have the option to renew the Maintenance Services for additional one year periods in exchange for additional consideration. In addition, the Company may provide training to customers. The Company defers revenue from the initial sale of the instrument equal to the contract value of the one year of Maintenance Services and recognizes the amounts ratably over the service delivery period.

The Company warrants that consumable diagnostic tests will be free from defects, when handled according to product specifications, for the stated life of the product. To fulfill valid warranty claims, the Company provides replacement product free of charge. Accordingly, the Company accrues warranty expense associated with the estimated defect rates of the consumable diagnostic tests.

The Company does not offer rights of return for instruments or consumable diagnostic tests.

Shipping and handling costs incurred associated with products sold to customers are recorded as a cost of product revenue in the consolidated statement of operations and comprehensive loss. Shipping and handling costs billed to customers in connection with a product sale are recorded as a component of product revenue in the consolidated statements of operations and comprehensive loss.

For multiple-element arrangements, the Company identifies the deliverables included within each agreement and evaluates which deliverables represent separate units of accounting. The determination that multiple elements in an arrangement meet the criteria for separate units of accounting requires the Company's management to exercise judgment. The Company accounts for those components as separate elements

when the following criteria are met: (1) the delivered items have value to the customer on a stand-alone basis; and, (2) if there is a general right of return relative to the delivered items, delivery or performance of the undelivered items is considered probable and within its control.

The consideration received is allocated among the separate units of accounting based on a selling price hierarchy. The selling price hierarchy is based on: (1) vendor specific objective evidence ("VSOE"), if available; (2) third party evidence of selling price if VSOE is not available; or (3) best estimated selling price ("BESP") if neither VSOE nor third party evidence is available. The Company generally expects that it will not be able to establish selling price using third-party evidence due to the nature of our products and the markets in which the Company competes, and, as such, the Company typically will determine selling price using VSOE or BESP.

When the Company establishes selling price using BESP, consideration is given to both market and Company-specific factors, including the cost to produce the deliverable and the anticipated margin on that deliverable, as well as the characteristics of markets in which the deliverable is sold.

Revenue earned from activities performed pursuant to research and development agreements is reported as research revenue in the consolidated statements of operations and comprehensive loss, using the proportional performance method as the work is completed, limited to payments earned, and the related costs are expensed as incurred as research and development expense. The timing of receipt of cash from the Company's research and development agreements generally differs from when revenue is recognized.

*Product Recall*

In July 2016, the Company initiated a voluntary recall and replacement of its T2Candida cartridges at certain customer sites because T2Candida was experiencing higher than normal invalid test rates as the T2Candida cartridges aged. As of June 30, 2016, as a result of this voluntary recall, the Company deferred revenue totaling $149,000 and recorded additional costs of product revenue of $41,000 related to returned products, which are no longer usable. As of December 31, 2017 there were no balances remaining related to this voluntary recall. As of December 31, 2016, the Company had approximately $37,000 of deferred revenue and $3,000 of warranty reserve remaining, both related to this voluntary recall. The impact of the voluntary recall on T2Candida cartridges in inventory was not material to the consolidated financial statements.

**Cost of Product Revenue**

Cost of product revenue includes the cost of materials, direct labor and manufacturing overhead costs used in the manufacture of consumable diagnostic tests sold to customers and related license and royalty fees. Cost of product revenue also includes depreciation on revenue generating T2Dx that have been placed with customers under reagent rental agreements; costs of materials, direct labor and manufacturing overhead costs on the T2Dx sold to customers; and other costs such as customer support costs, royalties and license fees, warranty and repair and maintenance expense on the T2Dx that have been placed with customers under reagent rental agreements.

**Research and Development Costs**

Costs incurred in the research and development of the Company's product candidates are expensed as incurred. Research and development expenses consist of costs incurred in performing research and development activities, including activities associated with performing services under research revenue arrangements, costs associated with the manufacture of developed products and include salaries and benefits, stock compensation, research-related facility and overhead costs, laboratory supplies, equipment and contract services.

**Impairment of Long Lived Assets**

The Company reviews long-lived assets, including capitalized T2 owned instruments and components, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If indications of impairment exist, projected future undiscounted cash flows associated with the asset or asset group are compared to the carrying amount to determine whether the asset's value is recoverable. During this review, the Company reevaluates the significant assumptions used in determining the original cost and estimated lives of long-lived assets. Although the assumptions may vary from asset to asset, they generally include operating results, changes in the use of the asset, cash flows and other indicators of value. Management then determines whether the remaining useful life continues to be appropriate or whether there has been an impairment of long-lived assets based primarily upon whether expected future undiscounted cash flows are sufficient to support the assets' recovery. If impairment exists, the Company would adjust the carrying value of the asset to fair value, generally determined by a discounted cash flow analysis. If the carrying value of the asset exceeds such projected undiscounted cash flows, the asset will be written down to its estimated fair value.

**Comprehensive Loss**

Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Comprehensive loss consists of net loss and other comprehensive loss, which includes certain changes in equity that are excluded from net loss. The Company's comprehensive loss equals reported net loss for all periods presented.

**Stock-Based Compensation**

The Company has a stock-based compensation plan which is more fully described in Note 8. The Company records stock-based compensation for options granted to employees and to members of the board of directors for their services on the board of directors, based on the grant date fair value of awards issued, and the expense is recorded on a straight-line basis over the applicable service period, which is generally four years. The Company accounts for non-employee stock-based compensation arrangements based upon the fair value of the consideration received or the equity instruments issued, whichever is more reliably measurable. The measurement date for non-employee awards is generally the date that the performance of services required for the non-employee award is complete. Stock-based compensation costs for non-employee awards is recognized as services are provided, which is generally the vesting period, on a straight-line basis.

The Company records the expense for stock option grants that vest upon achievement of performance-based milestones using the accelerated attribution method over the remaining service period when management determines that achievement of the milestone is probable. Management evaluates when the achievement of a performance-based milestone is probable based on the relative satisfaction of the performance conditions as of the reporting date.

The Company expenses restricted stock awards based on the fair value of the award on the date of issuance, on a straight-line basis over the associated service period of the award.

The Company uses the Black-Scholes-Merton option pricing model to determine the fair value of stock options. The use of the Black-Scholes-Merton option-pricing model requires management to make assumptions with respect to the expected term of the option, the expected volatility of the common stock consistent with the expected life of the option, risk-free interest rates and expected dividend yields of the common stock. The expected term was determined according to the simplified method, which is the average of the vesting tranche dates and the contractual term. Due to the lack of company specific historical and implied volatility data resulting from our limited public market trading history, we have based our estimate of expected volatility primarily on the historical volatility of a group of similar companies that are publicly traded. For these analyses, companies with comparable characteristics are selected, including enterprise value and position within the industry, and with historical share price information sufficient to meet the expected life of the stock-based awards. The Company computes the historical volatility data using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of its stock-based awards. The risk-free interest rate is determined by reference to U.S. Treasury zero-coupon issues with remaining maturities similar to the expected term of the options. The Company has not paid, and does not anticipate paying, cash dividends on shares of common stock; therefore, the expected dividend yield is assumed to be zero. The Company has elected an accounting policy to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates.

**Income Taxes**

The Company provides for income taxes using the liability method. The Company provides deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the Company's financial statement carrying amounts and the tax basis of assets and liabilities using enacted tax rates expected to be in effect in the years in which the differences are expected to reverse. A valuation allowance is provided to reduce the deferred tax assets to the amount that will more likely than not be realized.

The Company applies ASC 740 Income Taxes ("ASC 740") in accounting for uncertainty in income taxes. The Company does not have any material uncertain tax positions for which reserves would be required. The Company will recognize interest and penalties related to uncertain tax positions, if any, in income tax expense.

The Tax Cuts and Jobs Act ("the Act") was enacted on December 22, 2017. The Act reduces the US federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign sourced earnings. On December 22, 2017, the Securities and Exchange Commission issued guidance under Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118") directing taxpayers to consider the impact of the U.S. legislation as "provisional" when it does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete its accounting for the change in tax law.

**Guarantees**

As permitted under Delaware law, the Company indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was, serving at the Company's request in such capacity. The term of the indemnification is for the officer's or director's lifetime. The maximum potential amount of future payments the Company could be required to make is unlimited; however, the Company has directors' and officers' insurance coverage that limits its exposure and enables it to recover a portion of any future amounts paid.

The Company leases office, laboratory and manufacturing space under noncancelable operating leases. The Company has standard indemnification arrangements under the leases that require it to indemnify the landlord against all costs, expenses, fines, suits, claims, demands, liabilities, and actions directly resulting from any breach, violation or nonperformance of any covenant or condition of the Company's leases.

In the ordinary course of business, the Company enters into indemnification agreements with certain suppliers and business partners where the Company has certain indemnification obligations limited to the costs, expenses, fines, suits, claims, demands, liabilities and actions directly resulting from the Company's gross negligence or willful misconduct, and in certain instances, breaches, violations or nonperformance of covenants or conditions under the agreements.

As of December 31, 2017 and 2016, the Company had not experienced any material losses related to these indemnification obligations, and no material claims with respect thereto were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible, and no related reserves were established.

**Net Loss Per Share**

Basic net loss per share is calculated by dividing net loss applicable to common stockholders by the weighted-average number of shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by adjusting the weighted-average number of shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, determined using the treasury-stock method. For purposes of the diluted net loss per share calculation warrants to purchase common stock, stock options and unvested restricted stock are considered to be common stock equivalents, but have been excluded from the calculation of diluted net loss per share, as their effect would be anti-dilutive for all periods presented. Therefore, basic and diluted net loss per share applicable to common stockholders were the same for all periods presented.

**Recent Accounting Standards**

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies and adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its financial position or results of operations upon adoption.

*Accounting Standards Adopted*

In July 2015, the FASB issued ASU No. 2015-11, Inventory (Topic 330): *Simplifying the Measurement of Inventory* ("ASU 2015-11"). The standard simplifies the subsequent measurement of inventory by requiring inventory to be measured at the lower of cost and net realizable value for entities using the first-in-first out method of valuing inventory. ASU 2015-11 eliminates other measures required by current guidance to determine net realizable value. ASU 2015-11 is effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years and early adoption is permitted. The Company's adoption of this standard did not have a material effect on its consolidated financial statements.

In March 2016, the FASB released ASU No. 2016-09 *Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09") which is intended to simplify income tax accounting for excess tax benefits, accounting for forfeitures, and employer statutory withholding. Under the current guidance, excess tax benefits that result from an award vesting or settling are recognized in additional paid-in capital in the period that they reduce cash taxes payable. This requires the provision to be computed on a with and without option basis and may result in net operating loss and credit carryforwards on the balance sheet being less than what is available on the tax return. Under the new guidance, the income tax effects of awards will be recognized as a component of income tax expense when the awards vest or are settled (regardless if cash taxes are reduced). For interim reporting purposes, companies will account for excess tax benefits and tax deficiencies as discrete items in the period during which they occurred. The guidance is effective for public entities for fiscal years beginning after December 15, 2016, and interim periods within those years. Early adoption is permitted, however all of the guidance included in the update must be applied when adopted. The Company must use a modified retrospective transition method for adopting and record the cumulative effect of all unrecognized benefits and any change in valuation allowances at the end of the prior tax period as an adjustment to retained earnings. The Company's adoption of this standard did not have a material effect on its consolidated financial statements and prior periods have not been adjusted. As a result, the Company established a net operating loss deferred tax asset of $1.2 million to account for prior period excess tax benefits through retained earnings, however an offsetting valuation allowance of $1.2 million will also be established through retained earnings because it is not more likely than not that the deferred tax asset will be realized due to historical and expected future losses, such that there is no impact on the Company's consolidated financial statements. The Company also elected to maintain the use of estimated forfeitures in the calculation of stock based compensation.

In March 2016, the FASB issued ASU No. 2016-06, Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments ("ASU 2016-06"), which applies to all issuers of or investors in debt instruments with embedded call or put options. ASU 2016-06 clarifies the requirements for assessing whether contingent call or put options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. Entities performing the assessment under the guidance of ASU 2016-06 are required to assess the embedded call or put options solely in accordance with the four-step decision process. In addition, ASU 2016-06 clarifies what steps are required when assessing whether the economic characteristics and risks of call or put options are clearly and closely related to the economic characteristics and risks of their debt hosts. ASU 2016-06 is effective for financial statements issued for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years using the modified retrospective method for existing debt instruments. The Company's adoption of this standard did not have a material effect on its consolidated financial statements.

*Accounting Standards Issued, Not Adopted*

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASC 2016-15"), which provides guidance on the classification of certain specific cash flow issues including debt prepayment or extinguishment costs, settlement of certain debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of certain insurance claims and distributions received from equity method investees. The standard requires the use of a retrospective approach to all periods presented, but may be applied prospectively if retrospective application would be impracticable. The guidance is effective for public entities for fiscal years beginning after December 15, 2017, and interim periods within those years, and early application is permitted. The Company is currently evaluating the impact of its pending adoption of ASU 2016-15 on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases ("ASU 2016-02"), which applies to all leases. Under ASU 2016-02, a right-of-use asset and lease obligation will be recorded for all leases, whether operating or financing leases, while the statement of operations will reflect lease expense for operating leases and amortization and interest expense for financing leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 and interim periods within those years, which is the year ended December 31, 2019 for the Company. Entities are required to use a modified retrospective approach of adoption for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. The Company is evaluating the new guidance and the expected effect on the Company's consolidated financial statements.

In June 2014, the FASB issued amended guidance, ASU No. 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"), which is applicable to revenue recognition that will be effective for the Company for the year ending December 31, 2018, as a result of the deferral of the effective date adopted by the FASB in July 2015. The new guidance must be adopted using either a full retrospective approach for all periods presented or a modified retrospective approach. Early adoption prior to the original adoption date (annual reporting periods beginning after December 15, 2016) of ASU 2014-09 is not permitted. The new guidance applies a more principles-based approach to revenue recognition. The Company will adopt the new standard, effective January 1, 2018, under the modified retrospective method.

The Company established an implementation team to assess the potential impacts of the new standard and prepare for adoption. The implementation team has reviewed current accounting policies and practices and identified potential differences resulting from the application of the new standard. Findings and progress of the project have been regularly communicated to the Audit Committee and senior management.

The qualitative assessment of the standard provided below are estimates of the expected effects of the adoption of ASC 606. This represents our best estimate of the effects of adopting ASC 606 at the time of the preparation of this Annual Report on Form 10-K. The actual impact of ASC 606 is subject to change from these estimates and such change may be significant, pending the completion of our assessment in the first quarter of 2018.

The implementation team is in the process of completing an analysis of our revenue generating arrangements, including direct sales of instruments and consumables, sales of instruments and consumables to distributors, reagent rental agreements and research agreements. A detailed policy for each revenue stream has been drafted. The Company is in the process of implementing appropriate changes to controls, processes, and systems to support recognition and disclosure under the new standard. In addition, the Company continues to monitor changes, modifications, clarifications or interpretations, which may impact the results of adoption, undertaken by the FASB.

The impact of adopting the new standard is not expected to be material to 2017 and 2016 revenue. The most significant impacts of the new standard, upon adoption, are expected to be around the timing of revenue recognition. Specifically, under the new standard:

- Consideration allocated to the instrument in a direct sale will be recognized upon shipment and consideration allocated to installation will be recognized upon installation. Currently, revenue recognition for both obligations occurs upon installation.
- Revenue recognition on sales to distributors may be accelerated based on management's judgement regarding use of the sell-in or sell-through method. Currently, the Company recognizes revenue with new distributors based on the sell-through method, which requires deferral of revenue until product is sold to an end customer.

The Company does not expect the adoption of the new standard to a have material impact on our consolidated balance sheet. The Company does expect significant changes to its financial statement disclosures.

**3. Fair Value Measurements**

The Company measures the following financial assets at fair value on a recurring basis. There were no transfers between levels of the fair value hierarchy during any of the periods presented. The following tables set forth the Company's financial assets and liabilities carried at fair value categorized using the lowest level of input applicable to each financial instrument as of December 31, 2017 and 2016 (in thousands):

| | Balance at December 31, 2017 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| Assets: | | | | |
| Cash | $ 3,463 | $ 3,463 | $ — | $ — |
| Money market funds | 38,336 | 38,336 | — | — |
| Restricted cash | 260 | 260 | — | — |
| | $ 42,059 | $ 42,059 | $ — | $ — |
| Liabilities: | | | | |
| Derivative liability | $ 2,238 | $ — | $ — | $ 2,238 |
| | $ 2,238 | $ — | $ — | $ 2,238 |

| | Balance at December 31, 2016 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| Assets: | | | | |
| Cash | $ 16,887 | $ 16,887 | $ — | $ — |
| Money market funds | 56,601 | 56,601 | — | — |
| Restricted cash | 260 | 260 | — | — |
| | $ 73,748 | $ 73,748 | $ — | $ — |

The Company's Term Loan Agreement with CRG (Note 6) contains certain provisions that change the underlying cash flows of the instrument, including an interest-only period dependent on the achievement of the Approval Milestone by April 30, 2018, and acceleration of the obligations under the Loan Agreement under an event of default. In addition, under certain circumstances, a default interest rate of an additional 4.0% per annum will apply at the election of CRG on all outstanding obligations during the occurrence and continuance of an event of default. The Company concluded that these features are not clearly and closely related to the host instrument, and represent a single compound derivative and is required to be re-measured at fair value on a quarterly basis.

During the fourth quarter of 2017, the Company received communication from the FDA that suggested the approval timeline of T2Bacteria could be longer than the Company initially anticipated. The delay resulted in an increase in the probability of not achieving the Approval Milestone by April 30, 2018, as well an increase in the probability of the payment of contingent interest in future periods, based on the contractual payments that exist as of December 31, 2017. As such, in the fourth quarter, the Company recorded a derivative liability related to the Company's debt agreement with CRG of $2.2 million. The estimated fair value of the derivative liability was determined using a probability-weighted discounted cash flow model that includes principal and interest payments under the following scenarios: FDA approval by April 30, 2017 (40%), FDA approval after April 30, 2017 (20%) and no FDA approval (40%). Should the Company's assessment of these probabilities change, including amendments of certain revenue targets, there could be a change to the fair value of the derivative liability.

The following table provides a roll-forward of the fair value of the derivative liability (in thousands):

| | |
|---|---|
| Balance at December 31, 2016 | $ — |
| Change in fair value of derivative liability, recorded as interest expense | 2,238 |
| Balance at December 31, 2017 | $ 2,238 |

**4. Restricted Cash**

The Company is required to maintain a security deposit for its operating lease agreement for the duration of the lease agreement and for its credit cards as long as they are in place. At both December 31, 2017 and 2016, the Company had certificates of deposit for $260,000, which represented collateral as security deposits for its operating lease agreement for its facility and its credit card.

**5. Supplemental Balance Sheet Information**

**Property and Equipment**

Property and equipment consists of the following (in thousands)

| | Estimated Useful Life (Years) | December 31, 2017 | December 31, 2016 |
|---|---|---|---|
| Office and computer equipment | 3 | $ 409 | $ 409 |
| Software | 3 | 743 | 708 |
| Laboratory equipment | 5 | 4,224 | 4,516 |
| Furniture | 5-7 | 200 | 200 |
| Manufacturing equipment | 5 | 910 | 897 |
| Manufacturing tooling and molds | 0.5 | 255 | 154 |
| T2-owned instruments and components | 5 | 7,370 | 9,119 |
| Leasehold improvements | Lesser of useful life or lease term | 3,437 | 3,353 |
| Construction in progress | n/a | 1,591 | 1,299 |
| | | 19,139 | 20,655 |
| Less accumulated depreciation and amortization | | (9,124) | (7,066) |
| Property and equipment, net | | $ 10,015 | $ 13,589 |

Construction in progress is primarily comprised of equipment and leasehold improvement construction projects that have not been placed in service. T2-owned instruments and components is comprised of raw materials and work-in-process inventory that are expected to be used or used to produce Company-owned instruments, based on our business model and forecast, and completed instruments that will be used for internal research and development or reagent rental agreements with customers. Completed T2-owned instruments are placed in service once installation procedures are completed and are depreciated over five years. Depreciation expense for T2-owned instruments placed at customer sites pursuant to reagent rental agreements is recorded as a component of cost of product revenue and totaled $1.0 million and $0.6 million for the years ended December 31, 2017 and December 31, 2016, respectively. Depreciation expense for T2-owned instruments used for internal research and development is recorded as a component of research and development expense.

Depreciation and amortization expense of $2.9 million, $2.3 million and $1.5 million was charged to operations for the years ended December 31, 2017, 2016 and 2015, respectively.

During the fourth quarter of 2017, the Company received communication from the FDA that suggested the approval timeline would be longer than the company initially anticipated. The Company assessed the recoverability of T2-owned instruments based on delayed T2Bacteria cash flows and recorded an impairment charge of $2.6 million, related to T2-owned instruments and components, which is recorded in the cost of product revenue in the Consolidated Statements of Operations and Comprehensive Loss. The fair value used in the impairment calculation was based on the best estimated selling price of the underlying T2-owned instruments, less the estimated cost to sell the instruments.

**Accrued Expenses**

Accrued expenses consist of the following (in thousands):

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| Accrued payroll and compensation | $ 2,793 | $ 2,479 |
| Accrued research and development expenses | 818 | 846 |
| Accrued professional services | 1,018 | 884 |
| Other accrued expenses | 1,589 | 699 |
| Total accrued expenses | $ 6,218 | $ 4,908 |

The Company classified $0.6 million, related to a fee associated with the Company's Term Loan Agreement (Note 6), from other liabilities to accrued expenses and other current liabilities, as of December 31, 2017, to match the classification of the associated debt.

**6. Notes Payable**

Future principal payments on the notes payable as of December 31, 2017 are as follows (in thousands):

| | |
|---|---|
| Year ended December 31, | |
| 2018 | $ 47,483 |
| 2019 | 1,015 |
| 2020 | - |
| 2021 | - |
| 2022 | - |
| Total before unamortized discount and issuance costs | 48,498 |
| Less: paid-in-kind interest | (4,347) |
| Less: unamortized discount and issuance costs | (2,448) |
| Total notes payable | $ 41,703 |

The Term Loan Agreement with CRG is classified as a current liability on the balance sheet at December 31, 2017, based on the Company's consideration of the probability of violating a minimum liquidity covenant included in the Term Loan Agreement. The contractual terms of the agreement require payments of $5.8 million, $23.0 million and $17.2 million during the years ended December 31, 2020, 2021 and 2022, respectively.

*Term Loan Agreement*

In December 2016, the Company entered into a Term Loan Agreement (the "Term Loan Agreement") with CRG. The Company initially borrowed $40.0 million pursuant to the Term Loan Agreement and may borrow up to an additional $10.0 million at any time through and including July 27, 2018, provided that, among other conditions, the Company receives 510(k) clearance for the marketing of T2BacteriaTM by the U.S. Food and Drug Administration ("FDA") on or before April 30, 2018 (the "Approval Milestone"). The Term Loan Agreement has a six-year term with three years (through December 30, 2019) of interest-only payments, which period shall be extended to four years (through December 30, 2020) if the Company achieves the Approval Milestone, after which quarterly principal and interest payments will be due through the December 30, 2022 maturity date. Interest on the amounts borrowed under the Term Loan Agreement accrues at an annual fixed rate of (a) prior to the Approval Milestone, 12.50%, 4.0% of which may be deferred during the interest-only period by adding such amount to the aggregate principal loan amount and (b) following the Approval Milestone, 11.50%, 3.5% of which may be deferred during the interest-only period by adding such amount to the aggregate principal loan amount. In addition, if the Company achieves certain financial performance metrics, the loan will convert to interest-only until the December 30, 2022 maturity, at which time all unpaid principal and accrued unpaid interest will be due and payable. The Company is required to pay CRG a financing fee based on the loan principal amount drawn. The Company is also required to pay a final payment fee of 8% of the principal outstanding upon repayment. In March 2018 the Term Loan Agreement was amended to extend the Approval Milestone to June 30, 2018, the additional $10.0 million funding through September 27, 2018 and reduce the fiscal year 2018 revenue target to $7.0 million.

The Company may prepay all or a portion of the outstanding principal and accrued unpaid interest under the Term Loan Agreement at any time upon prior notice subject to a certain prepayment fee during the first five years of the term and no prepayment fee thereafter. As security for its obligations under the Term Loan Agreement the Company entered into a security agreement with CRG whereby the Company granted a lien on substantially all of its assets, including intellectual property. The Loan Agreement also contains customary affirmative and negative covenants for a credit facility of this size and type, including a requirement to maintain a minimum cash balance. The Loan Agreement also requires the Company to achieve certain revenue targets, whereby the Company is required to pay double the amount of any shortfall as an acceleration of principal payments. The revenue target for fiscal year 2018 is $7.0 million. The Loan Agreement includes a subjective acceleration clause whereby an event of default, including a material adverse change in the business, operations, or conditions (financial or otherwise), could result in the acceleration of the obligations under the Loan Agreement. Under certain circumstances, a default interest rate of an additional 4.00% per annum will apply at the election of CRG on all outstanding obligations during the occurrence and continuance of an event of default. CRG has

not exercised its right under this clause, as there have been no such events. On December 18, 2017, the Term Loan Agreement was amended and the 2017 minimum revenue target was reduced to $3.0 million from $5.0 million.

The Company assessed the terms and features of the Term Loan Agreement, including the interest-only period dependent on the achievement of the Approval Milestone by April 30, 2018, and acceleration of the obligations under the Loan Agreement under an event of default, of the Term Loan Agreement in order to identify any potential embedded features that would require bifurcation. In addition, under certain circumstances, a default interest rate of an additional 4.0% per annum will apply at the election of CRG on all outstanding obligations during the occurrence and continuance of an event of default. The Company concluded that these features are not clearly and closely related to the host instrument, and represent a single compound derivative and is required to be re-measured at fair value on a quarterly basis.

During the fourth quarter of 2017, the Company received communication from the FDA that suggested the approval timeline of T2Bacteria would be longer than the Company initially anticipated. The delay resulted in an increase in the probability of not achieving the Approval Milestone by April 30, 2018, as well an increase in the probability of the payment of contingent interest in future periods, based on the contractual payments requirements that exist as of December 31, 2017. As such, in the fourth quarter, the Company recorded a derivative liability related to the Company's debt agreement with CRG of $2.2 million (Note 3).

In December 2016, pursuant to the Term Loan Agreement, the Company made an initial draw of $39.2 million, net of financing fees. The Company used approximately $28.0 million of the initial proceeds to repay approximately $27.5 million of outstanding debt pursuant to the Loan and Security Agreement and to repay approximately $0.5 million of outstanding debt pursuant to the Promissory Note. Upon the repayment of all amounts owed by the Company under these agreements, all commitments were terminated and all security interests granted by the Company were released.

In connection with the Term Loan Agreement entered into in December 2016, the Company issued to CRG four separate warrants to purchase a total of 528,958 shares of the Company's common stock. The warrants are exercisable any time prior to December 30, 2026 at a price of $8.06 per share, with typical provisions for termination upon a change of control or a sale of all or substantially all of the assets of the Company. The warrants are classified within stockholders' equity, and the proceeds were allocated between the debt and warrants based on their relative fair value. The fair value of the warrants was determined by the Black Scholes Merton option pricing model. The fair value of the warrants at December 30, 2016 was $1.8 million.

*Equipment Lease Credit Facility*

In October 2015, the Company signed the $10.0 million Credit Facility (the "Credit Facility") with Essex Capital Corporation ("Essex") to fund capital equipment needs. As one of the conditions of the Term Loan Agreement, the Credit Facility is capped at a maximum of $5.0 million. Under the Credit Facility, Essex will fund capital equipment purchases presented by the Company. The Company will repay the amounts borrowed in 36 equal monthly installments from the date of the amount funded. At the end of the 36 month lease term, the Company has the option to (a) repurchase the leased equipment at the lesser of fair market value or 10% of the original equipment value, (b) extend the applicable lease for a specified period of time, which will not be less than one year, or (c) return the leased equipment to the Lessor.

In April 2016 and June 2016, the Company completed the first two draws under the Credit Facility of $2.1 million and $2.5 million, respectively. The Company will make monthly payments of $67,000 under the first draw and $79,000 under the second draw. The borrowings under the Credit Facility are treated as capital leases. The amortization of the assets conveyed under the Credit Facility is included as a component of depreciation expense.

**7. Stockholders' Equity**

*Common Stock*

Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the board of directors, subject to the prior rights of holders of all classes of stock outstanding. As of December 31, 2017, a total of 3,785,083 shares and 1,207,825 shares of common stock were reserved for issuance upon (i) the exercise of outstanding stock options and (ii) the issuance of stock awards under the Company's 2014 Incentive Award Plan and 2014 Employee Stock Purchase Plan, respectively.

*Private Investment in Public Equity Financing*

On September 21, 2016, Canon U.S.A., Inc. ("Canon") became a related party when the Company sold 6,055,341 shares of its common stock (the "Canon Shares") to Canon at $6.56 per share, the closing price on this date, for an aggregate cash purchase price of $39.7 million. As of September 21, 2016, the Canon Shares represented 19.9% of the outstanding shares of common stock of the Company. In connection with the director to the Company's board of directors. On March 20, 2017, the Company filed with the SEC a registration statement on Form S-3 for purposes of registering the resale of the Canon Shares.

*Confidentially Marketed Public Offering*

On September 15, 2017, the Company sold 5,031,250 shares of its common stock in a CMPO at $4.00 per share, for an aggregate gross cash purchase price of $20.1 million, or proceeds of $18.8 million after underwriters discount and expenses

**8. Stock-Based Compensation**

**Stock Incentive Plans**

*2006 Stock Incentive Plan*

The Company's 2006 Stock Option Plan (the "2006 Plan") was established for granting stock incentive awards to directors, officers, employees and consultants to the Company. Upon closing of the Company's Initial Public Offering ("IPO") in August 2014, the Company ceased granting stock incentive awards under the 2006 Plan. The 2006 Plan provided for the grant of incentive and non-qualified stock options and restricted stock grants as determined by the Board of Directors. Under the 2006 Plan, stock options were generally granted with exercise prices equal to or greater than the fair value of the common stock as determined by the board of directors, expired no later than 10 years from the date of grant, and vest over various periods not exceeding 4 years.

*2014 Stock Incentive Plan*

The Company's 2014 Plan (the "2014 Plan" and, together with the 2006 Plan, the "Stock Incentive Plans") provides for the issuance of shares of common stock in the form of stock options, awards of restricted stock, awards of restricted stock unit awards, performance awards, dividend equivalent awards, stock payment awards and stock appreciation rights to directors, officers, employees and consultants of the Company. Since the establishment of the 2014 Plan, the Company has only granted stock options and restricted stock units. Generally, stock options are granted with exercise prices equal to or greater than the fair value of the common stock on the date of grant, expire no later than 10 years from the date of grant, and vest over various periods not exceeding 4 years.

The number of shares reserved for future issuance under the 2014 Plan is the sum of (1) 823,529, (2) any shares that were granted under the 2006 Plan which are forfeited, lapse unexercised or are settled in cash subsequent to the effective date of the 2014 Plan and (3) an annual increase on the first day of each calendar year beginning January 1, 2015 and ending on January 1, 2024, equal to the lesser of (A) 4% of the shares outstanding on the final day of the immediately preceding calendar year and (B) such smaller number of shares determined by the Board of Directors. As of December 31, 2017 there were 1,026,422 shares available for future grant under the Plan.

**Stock Options**

During the years ended December 31, 2017, 2016, and 2015, the Company granted options with an aggregate fair value of $2.7 million and $7.0 million, and $10.1 million, respectively, which are being amortized into compensation expense over the vesting period of the options as the services are being provided.

The following is a summary of option activity under the Plan (in thousands, except share and per share amounts):

| | Number of Shares | Weighted-Average Exercise Price Per Share | Weighted-Average Remaining Contractual Term (In years) | Aggregate Intrinsic Value |
|---|---|---|---|---|
| Outstanding at December 31, 2016 | 4,042,627 | $ 8.20 | 7.05 | $ 4,091 |
| Granted | 903,200 | 5.07 | | |
| Exercised | (223,352) | 2.36 | | 553 |
| Forfeited | (587,040) | 9.12 | | |
| Canceled | (350,352) | 11.96 | | |
| Outstanding at December 31, 2017 | 3,785,083 | 7.31 | 6.88 | 1,989 |
| Exercisable at December 31, 2017 | 2,327,392 | 7.19 | 5.75 | 1,923 |
| Vested or expected to vest at December 31, 2017 | 3,598,126 | 7.35 | 6.77 | 1,977 |

Included in the stock options outstanding at December 31, 2016 are 146,066 options to purchase common stock granted to certain executive officers of the Company that vest upon the achievement of certain performance conditions, which include the attainment of specified operating result and regulatory targets, by December 31, 2017. Included in the stock options forfeited during the year ended December 31, 2017 are 40,000 options to purchase common stock upon the achievement of certain performance conditions. There are 106,066 performance based options included in the outstanding balance at December 31, 2017. The operating results and regulatory target were not achieved by December 31, 2017, so no expense was recorded.

The weighted-average fair values of options granted in the years ended December 31, 2017, 2016, and 2015 were $2.95, $4.68, and $8.42 per share, respectively, and were calculated using the following estimated assumptions:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Weighted-average risk-free interest rate | 1.99% | 1.42% | 1.69% |
| Expected dividend yield | 0.00% | 0.00% | 0.00% |
| Expected volatility | 60% | 61% | 56% |
| Expected terms | 6.0 years | 6.0 years | 6.0 years |

The total fair values of stock options that vested during the years ended December 31, 2017, 2016, and 2015 were $3.5 million, $4.9 million, and $4.0 million, respectively.

As of December 31, 2017, there was $5.3 million of total unrecognized compensation cost related to non-vested stock options granted under the Stock Incentive Plans. Total unrecognized compensation cost will be adjusted for future changes in the estimated forfeiture rate. The Company expects to recognize that cost over a remaining weighted-average period of 2.3 years as of December 31, 2017.

**Restricted Stock Units**

During the year ended December 31, 2017 the Company awarded shares of restricted stock units to certain employees at no cost to them, which cannot be sold, assigned, transferred or pledged during the restriction period. The restricted stock and restricted stock units vest through the passage of time, assuming continued employment. Restricted stock units are not included in issued and outstanding common stock until the shares are vested and released. The fair value of the award at the time of the grant is expensed on a straight line basis. The granted restricted stock units had an aggregate fair value of $2.9 million, which are being amortized into compensation expense over the vesting period of the options as the services are being provided.

The following is a summary of restricted stock unit activity under the Plan (in thousands, except share and per share amounts):

| | Number of Shares | Weighted-Average Grant Date Fair Value |
|---|---|---|
| Nonvested at December 31, 2016 | 272,195 | $ 5.83 |
| Granted | 552,925 | 5.17 |
| Exercised | (116,173) | 5.83 |
| Forfeited | (102,450) | 5.79 |
| Canceled | — | — |
| Nonvested at December 31, 2017 | 606,497 | 5.23 |

During the year ended December 31, 2017, 116,173 restricted stock units vested.

As of December 31, 2017, there was $2.5 million of total unrecognized compensation cost related to non-vested stock options granted under the Stock Incentive Plans. Total unrecognized compensation cost will be adjusted for future changes in the estimated forfeiture rate. The Company expects to recognize that cost over a remaining weighted-average period of 1.4 years as of December 31, 2017.

**Employee Stock Purchase Plan**

The 2014 Employee Stock Purchase Plan (the “2014 ESPP”) period is semi-annual and allows participants to purchase the Company’s common stock at 85% of the lower of (i) the market value per share of common stock on the first day of the offering period or (ii) the market value per share of the common stock on the purchase date. Each participant can purchase up to a maximum of $25,000 per calendar year in fair market value. The first plan period began on August 7, 2014. Stock-based compensation expense from the 2014 ESPP for the years ended December 31, 2017, 2016 and 2015 was approximately $0.2 million, $0.3 million and $0.2 million, respectively.

The fair value of the purchase rights granted under this plan was estimated on the date of grant that uses the following weighted-average assumptions, which were derived in a manner similar to those discussed in Note 2 relative to stock options:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Weighted-average risk-free interest rate | 1.03% | 0.50% | 0.19% |
| Expected dividend yield | 0.00% | 0.00% | 0.00% |
| Expected volatility | 68% | 67% | 57% |
| Expected terms | 0.5 years | 0.5 years | 0.5 years |

The 2014 ESPP provides initially for the granting of up to 220,588 shares of the Company's common stock to eligible employees. In addition, on the first day of each calendar year beginning January 1, 2015 and ending on January 1, 2024, the number of common shares available under the Plan shall be increased by the number of shares equal to the lesser of (1) 1% of the common shares outstanding on the final day of the immediately preceding calendar year and (2) such smaller number of common shares as determined by the Board of Directors. At December 31, 2017, there were 181,403 shares available under the 2014 ESPP.

**Stock-Based Compensation Expense**

The following table summarizes the stock-based compensation expense for stock options granted to employees and non-employees, as well as stock-compensation expense for the 2014 ESPP that was recorded in the Company's results of operations for the years presented (in thousands):

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Cost of product revenue | $ 125 | $ 123 | $ — |
| Research and development | 1,384 | 1,127 | 1,213 |
| Selling, general and administrative | 3,196 | 3,480 | 2,840 |
| Total stock-based compensation expense | $ 4,705 | $ 4,730 | $ 4,053 |

For the years ended December 31, 2017 and December 31, 2016, $0.1 million and $0.1 million of stock-based compensation expense was capitalized, respectively, as part of inventory or T2-owned instruments and components.

**9. Warrants**

In connection with the Term Loan Agreement entered into in December 2016, the Company issued to CRG four separate warrants to purchase a total of 528,958 shares of the Company's common stock. The warrants are exercisable any time prior to December 30, 2026 at a price of $8.06 per share, with typical provisions for termination upon a change of control or a sale of all or substantially all of the assets of the Company. The warrants are classified within stockholders' equity, and the proceeds were allocated between the debt and warrants based on their relative fair value. The fair value of the warrants was determined by the Black-Scholes-Merton option pricing model. The fair value of the warrants at date of issuance was $1.8 million.

**10. Net Loss Per Share**

The following table presents the calculation of basic and diluted net loss per share applicable to common stockholders (in thousands, except share and per share data):

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Numerator: | | | |
| Net loss | $ (62,428) | $ (54,804) | $ (45,290) |
| Denominator: | | | |
| Weighted-average number of common shares outstanding — basic and diluted | 32,131,512 | 26,015,751 | 20,501,748 |
| Net loss per share applicable to common stockholders — basic and diluted | $ (1.94) | $ (2.11) | $ (2.21) |

The following shares were excluded from the calculation of diluted net loss per share applicable to common stockholders, prior to the application of the treasury stock method, because their effect would have been anti-dilutive for the periods presented:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Options to purchase common shares | 3,785,083 | 4,042,627 | 3,484,298 |
| Restricted stock units | 606,497 | 272,195 | — |
| Warrants to purchase common stock | 528,958 | 528,958 | — |
| Total | 4,920,538 | 4,843,780 | 3,484,298 |

**11. Income Taxes**

The reconciliation of the U.S. federal statutory rate to the Company's effective tax rate is as follows:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2017 | 2016 | 2015 |
| Tax at statutory rates | 35.0% | 35.0% | 35.0% |
| State income taxes | 6.5 | 5.2 | 6.6 |
| Permanent differences | (2.5) | (1.2) | (1.3) |
| Research and development credits | 1.5 | 1.3 | 1.5 |
| US tax rate change | (52.7) | — | — |
| Change in valuation allowance | 12.2 | (40.3) | (41.8) |
| Effective tax rate | 0.0% | 0.0% | 0.0% |

The significant components of the Company's deferred tax asset consist of the following at December 31, 2017 and 2016 (in thousands):

| | December 31, | |
|---|---|---|
| | 2017 | 2016 |
| Deferred tax assets: | | |
| Net operating loss carryforwards | $ 62,670 | $ 69,411 |
| Tax credits | 6,924 | 5,269 |
| Other temporary differences | 2,723 | 1,636 |
| Start-up expenditures | 3,214 | 5,088 |
| Stock option expenses | 2,127 | 2,779 |
| Total deferred tax assets | 77,658 | 84,183 |
| Deferred tax asset valuation allowance | (77,546) | (83,924) |
| Net deferred tax assets | 112 | 259 |
| Deferred tax liabilities: | | |
| Prepaid expenses | (112) | (259) |
| Net deferred taxes | $ — | $ — |

The Tax Cuts and Jobs Act was enacted in the United States on December 22, 2017. The Act reduces the US federal corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, and creates new taxes on certain foreign sourced earnings. In December 2017, the SEC issued SAB 118, which directs taxpayers to consider the impact of the U.S. legislation as "provisional" when it does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete its accounting for the change in tax law. As of December 31, 2017, we recognized a provisional amount of $0 for the transition tax.

We re-measured certain deferred tax assets and liabilities based on the rates at which they are anticipated to reverse in the future, which is generally 21%. However, we are still examining certain aspects of the Act and refining our calculations, which could potentially affect the measurement of these balances or potentially give rise to new deferred tax amounts. The provisional amount recorded related to the re-measurement of our deferred tax balance was a tax expense of $32.9 million which was offset by an adjustment to the valuation allowance against our deferred taxes of $32.9 million.

In 2017 and 2016, the Company did not record a benefit for income taxes related to its operating losses incurred. ASC 740 requires a valuation allowance to reduce the deferred tax assets reported if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Based upon the level of historical U.S. losses and future projections over the period in which the net deferred tax assets are deductible, at this time, management believes it is more likely than not that the Company will not realize the benefits of these deductible differences, and as a result the Company continues to maintain a valuation allowance for the full amount of the 2017 deferred tax assets. The valuation allowance decreased $6.4 million, and increased $22.1 million and $18.9 million for the years ended December

31, 2017, 2016 and 2015, respectively. The decrease in the 2017 valuation allowance is primarily attributable to the reduction in the US corporate tax rate enacted in Q4 2017. The increase in 2016 and 2015 is primarily related to each year's taxable loss.

As of December 31, 2017, the Company had federal and state net operating losses of $229.1 million and $237.9 million, respectively, which are available to offset future taxable income, if any, through 2037. The Company also had federal and state research and development tax credits of $4.4 million and $3.2 million, respectively, which expire at various dates through 2037. Under the provisions of the Internal Revenue Code, the net operating loss and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service and state tax authorities. Net operating loss and tax credit carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant stockholders over a three-year period in excess of 50%, as defined under Sections 382 and 383 of the Internal Revenue Code, respectively, as well as similar state provisions. This could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. The Company has completed several financings since its inception which may have resulted in a change in control as defined by Sections 382 and 383 of the Internal Revenue Code, or could result in a change in control in the future. The Company has not conducted an assessment to determine whether there may have been a Section 382 or 383 ownership change.

The Company has no unrecognized tax benefits. Interest and penalty charges, if any, related to uncertain tax positions would be classified as income tax expenses in the accompanying consolidated statements of operations. At December 31, 2017 and 2016, the Company had no accrued interest or penalties related to uncertain tax positions.

The Company files income tax returns in the U.S. federal tax jurisdiction and various state jurisdictions. Since the Company is in a loss carryforward position, the Company is generally subject to examination by the U.S. federal, state and local income tax authorities for all tax years in which a loss carryforward is available. The Company does not have any international operations as of December 31, 2017. The statute of limitations for assessment by federal and state tax jurisdictions in which the Company has business operations is open for tax years ending December 31, 2014, 2015, and 2016. The tax years under examination vary by jurisdiction.

**12. Commitments and Contingencies**

*Operating Leases*

In August 2010, the Company entered into a five-year, non-cancelable operating lease for office and laboratory space at its headquarters in Lexington, MA. The lease commenced on January 1, 2011, with the Company providing a security deposit of $400,000. In accordance with the operating lease agreement, the Company reduced its security deposit to $240,000 in May 2015, which is recorded as restricted cash in the consolidated balance sheets. In July 2014, the Company entered into an amendment to expand the office and laboratory space leased. In May 2015, the Company entered into an amendment to extend the term from December 31, 2015 to December 31, 2017. In March 2017, the Company entered into an amendment to extend the term from December 31, 2017 to December 31, 2021. The rent expense, inclusive of the escalating rent payments, is recognized on a straight-line basis over the lease term.

In May, 2013, the Company entered into a two-year operating lease for additional office, laboratory and manufacturing space in Wilmington, MA. The Company entered into an amendment in September 2015 to extend this lease term through December 31, 2017. In August 2017, the Company entered into an amendment to extend the term from December 31, 2017 to December 31, 2018

In November, 2014 the Company entered into an agreement to rent additional office space in Lexington, MA. The term of the agreement is two years, commencing December 2014. In April 2015, the Company entered into an amendment to extend the term of this agreement. The amendment extends the agreement term from December 31, 2016 to December 31, 2017. In connection with this agreement, the Company paid a security deposit totaling $50,000, which is recorded as a component of prepaid assets in the consolidated balance sheets. In May 2015, the Company entered into an amendment to expand existing manufacturing facilities in Lexington, MA. The lease amendment term is June 1, 2015 to December 31, 2017. In September 2017, the Company entered into an amendment to extend the term from December 31, 2017 to December 31, 2021

In November, 2014, the Company entered into a lease for additional laboratory space in Lexington, MA. The lease term commenced April 1, 2015 and extends for six years. The rent expense, inclusive of the escalating rent payments, is recognized on a straight-line basis over the lease term. As an incentive to enter into the lease, the landlord paid approximately $1.4 million of the $2.2 million space build-out costs. The incentive is recorded as a component of lease incentives on the consolidated balance sheets and is amortized as a reduction in rent expense on a straight-line basis over the term of the lease. In connection with this lease agreement, the Company paid a security deposit of $281,000, which is recorded as a component of other assets in the consolidated balance sheets.

Future minimum non-cancelable lease payments under the Company's operating leases as of December 31, 2017 are as follows (in thousands):

| | |
|---|---|
| Year ending December 31, | |
| 2018 | $ 2,173 |
| 2019 | 2,149 |
| 2020 | 2,201 |
| 2021 | 1,926 |
| | $ 8,449 |

Rent expense for the years ended December 31, 2017, 2016, and 2015 was $1.9 million, $1.8 million, and $1.6 million, respectively.

*License Agreement*

In 2006, the Company entered into a license agreement with a third party, pursuant to which the third party granted the Company an exclusive, worldwide, sublicenseable license under certain patent rights to make, use, import and commercialize products and processes for diagnostic, industrial and research and development purposes. The Company agreed to pay an annual license fee ranging from $5,000 to $25,000 for the royalty-bearing license to certain patents. For the years ended December 31, 2017, 2016 and 2015, the Company incurred $30,000, $31,000 and $34,000, respectively, for regulatory milestones, license fees and reimbursed patent costs under the agreement. The Company also issued a total of 84,678 shares of common stock pursuant to the agreement in 2006 and 2007, which were recorded at fair value at the date of issuance.The Company is required to pay royalties on net sales of products and processes that are covered by patent rights licensed under the agreement at a percentage ranging in the low single digits, subject to reductions and offsets in certain circumstances, as well as a royalty on net sales of products that the Company sublicenses at a low double-digit percentage of specified gross revenue. Royalties that became due under this agreement for the years ended December 31, 2017 and 2016 were immaterial.

**13. 401(k) Savings Plan**

In March, 2008, the Company established a retirement savings plan under Section 401(k) of the Internal Revenue Code (the "401(k) Plan"). The 401(k) Plan covers substantially all employees of the Company who meet minimum age and service requirements, and allows participants to defer a portion of their annual compensation on a pretax basis. Company contributions to the 401(k) Plan may be made at the discretion of the board of directors. Company contributions to the 401(k) Plan were $190,000 and $237,000 for the years ended December 31, 2017 and 2016, respectively. No contributions were made during the year ended December 31, 2015.

**14. Co-Development Agreements**

*Canon US Life Sciences*

On September 21, 2016, Canon became a related party when the Company sold the Canon Shares for an aggregate cash purchase price of $39.7 million, which represented 19.9% of the outstanding shares of common stock of the Company. On February 3, 2015, the Company entered into a Co-Development Partnership Agreement (the "Co-Development Agreement") with Canon U.S. Life Sciences, Inc. ("Canon US Life Sciences") to develop a diagnostic test panel to rapidly detect Lyme disease. Under the terms of the Co-Development Agreement, the Company received an upfront payment of $2.0 million from Canon US Life Sciences and the agreement includes an additional $6.5 million of consideration upon achieving certain development and regulatory milestones for total aggregate payments of up to $8.5 million. In October 2015, the Company achieved a specified technical requirement and received $1.5 million related to the achievement of the milestone. The Company is eligible to receive an additional $5.0 million under the arrangement, in two milestone payments of $2.0 million and $3.0 million, related to the achievement of additional development and regulatory milestones. All payments under the Co-Development Agreement are non-refundable once received. The Company will retain exclusive worldwide commercialization rights of any products developed under the Co-Development Agreement, including sales, marketing and distribution and Canon US Life Sciences will not receive any commercial right and will be entitled to only receive royalty payments on the sales of all products developed under the Co-Development Agreement. Either party may terminate the Co-Development Agreement upon the occurrence of a material breach by the other party (subject to a cure period).

The Company evaluated the deliverables under the Co-Development Agreement and determined that the Co-Development Agreement included one unit of accounting, the research and development services, as the joint research and development committee deliverable was deemed to be *de minimus* . The Company is recognizing revenue for research and development services as a component of research revenue in the consolidated financial statements as the services are delivered using the proportional performance method of accounting, limited to payments earned. Costs incurred to deliver the services under the Co-Development Agreement are recorded as research and development expense in the consolidated financial statements.

The Company recorded revenue of $0.3 million, $1.8 million and $1.4 million for the years ended December 31, 2017, 2016, and 2015, respectively, under the Co-Development Agreement, and expects to record revenue over the next two years, provided development and regulatory milestones are achieved.

*Allergan Sales, LLC*

On November 1, 2016, the Company entered into a Co-Development, Collaboration and Co-Marketing Agreement (the "Allergan Agreement") with Allergan Sales, LLC ("Allergan Sales") to develop (1) a direct detection diagnostic test panel that adds one additional bacteria species to the existing T2Bacteria product candidate (the "T2Bacteria II Panel"), and (2) a direct detection diagnostic test panel for testing drug resistance directly in whole blood (the "T2GNR Panel" and, together with the T2Bacteria II Panel, the "Developed Products"). In addition, both the Company and Allergan Sales will participate in a joint research and development committee and Allergan Sales will receive the right to cooperatively market the T2Candida, T2Bacteria, and the Developed Products under the Allergan Agreement to certain agreed-upon customers.

Under the terms of the Allergan Agreement, the Company received an upfront payment of $2.0 million from Allergan Sales and will receive additional milestone payments upon achieving certain developmental milestones for total aggregate payments of up to $4.0 million. All payments under the Allergan Agreement are non-refundable once received. The Company will retain exclusive worldwide commercialization rights of any products developed under the Allergan Agreement, including distribution, subject to Allergan Sales' right to co-market the Developed Products. Allergan Sales, at its election, may co-market T2Candida, T2Bacteria and the Developed Products worldwide to certain agreed-upon customers and will receive royalty based on its sales for a period of time.

The Company evaluated the deliverables under the Allergan Agreement and determined that the Allergan Agreement included two units of accounting, the research and development services for the T2Bacteria II Panel and the research and development services for the T2GNR Panel, as the joint research and development committee and right to cooperatively market deliverables were deemed to be *de minimus* . The Company is recognizing revenue for research and development services as a component of research revenue in the consolidated financial statements as the services are delivered using the proportional performance method of accounting, limited to payments earned. Costs incurred to deliver the services under the Allergan Agreement are recorded as research and development expense in the consolidated financial statements.

The Company recorded revenue of $0.9 million during the year ended December 31, 2017 under the Allergan Agreement and expects to record revenue over the next two years, provided development and regulatory milestones are achieved. The Company did not record revenue during the year ended December 31, 2016 under the Allergan Agreement.

**15. Quarterly Financial Data (unaudited)**

| | Year ended December 31, 2017 (In thousands, except per share data) | | | |
|---|---|---|---|---|
| | First Quarter | Second Quarter | Third Quarter | Fourth Quarter |
| Revenue: | | | | |
| Product revenue | $ 631 | $ 735 | $ 739 | $ 1,335 |
| Research revenue | 310 | 221 | 369 | 326 |
| Total revenue | $ 941 | $ 956 | $ 1,108 | $ 1,661 |
| Costs and expenses: | | | | |
| Cost of product revenue | 1,627 | 1,989 | 2,106 | 6,306 |
| Research and development | 6,585 | 7,112 | 5,880 | 4,156 |
| Selling, general and administrative | 5,874 | 5,759 | 5,559 | 5,565 |
| Total costs and expenses | 14,086 | 14,860 | 13,545 | 16,027 |
| Loss from operations | $ (13,145) | $ (13,904) | $ (12,437) | $ (14,366) |
| Net loss | $ (14,703) | $ (15,456) | $ (14,076) | $ (18,193) |
| Per share data: | | | | |
| Net loss per common share—basic and diluted | $ (0.48) | $ (0.50) | $ (0.45) | $ (0.51) |

| | Year ended December 31, 2016 (In thousands, except per share data) | | | |
|---|---|---|---|---|
| | First Quarter | Second Quarter | Third Quarter | Fourth Quarter |
| Revenue: | | | | |
| Product revenue | $ 437 | $ 151 | $ 580 | $ 579 |
| Research revenue | 659 | 839 | 504 | 331 |
| Total revenue | $ 1,096 | $ 990 | $ 1,084 | $ 910 |
| Costs and expenses: | | | | |
| Cost of product revenue | 1,026 | 1,781 | 1,894 | 2,171 |
| Research and development | 6,589 | 6,369 | 5,200 | 5,851 |
| Selling, general and administrative | 6,204 | 6,143 | 5,935 | 5,795 |
| Total costs and expenses | 13,819 | 14,293 | 13,029 | 13,817 |
| Loss from operations | $ (12,723) | $ (13,303) | $ (11,945) | $ (12,907) |
| Net loss | $ (13,426) | $ (14,046) | $ (12,783) | $ (14,549) |
| Per share data: | | | | |
| Net loss per common share—basic and diluted | $ (0.55) | $ (0.58) | $ (0.51) | $ (0.48) |

## Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

## Item 9A. CONTROLS AND PROCEDURES

**Evaluation of Disclosure Controls and Procedures**

Management conducted an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer (our principal executive officer and principal financial officer, respectively), of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of December 31, 2017. Based on the evaluation of our disclosure controls and procedures as December, 2017, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, the Company's disclosure controls and procedures were not effective due to a material weaknesses in our internal control over financial reporting as described below in Management's Annual Report on Internal Control over Financial Reporting.

**Management's Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission, or COSO, in Internal Control—Integrated Framework (2013). Based on our assessment, the Company's management identified a material weakness in our internal control over financial reporting relating to the accounting for instruments which are classified as either inventory and property and equipment depending on their future use. Specifically, the Company concluded that a deficiency exists in the design and execution of the review control over the accounting of instrument valuation, including the recoverability analyses for the Company's instruments. Management determined that its accounting process for the review of these accounts lacked adequate levels of monitoring and review to appropriately identify and correct errors in the calculation in a timely manner.

The control deficiency described above resulted in certain material and immaterial misstatements in the preliminary financial statement accounts that were corrected prior to the issuance of the annual consolidated financial statements. The errors noted were all related to and corrected in the fourth quarter. The control deficiency creates a possibility that a material misstatement to our consolidated financial statements will not be prevented or detected on a timely basis, and therefore we concluded that the deficiency represents a material weakness in our internal control over financial reporting and our internal control over financial reporting for instruments in inventory and fixed assets is not effective as of December 31, 2017.

We are developing and implementing new control processes and procedures to address this weakness. We are undertaking steps to design and implement sufficient controls over accounting for inventory. These steps include increasing oversight by our management in the calculation and reporting of instrument valuation, including the recoverability analyses related to instruments reported in the Company's balance sheet in both inventory and property and equipment.

**Changes in Internal Control Over Financial Reporting**

Except as noted above, during the quarter ended December 31, 2017, there have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## Item 9B. OTHER INFORMATION

None.

## PART III.

## Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is incorporated in this Annual Report by reference from the information under the captions "Board of Directors Information," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" contained in the Proxy Statement to be filed in connection with our 2018 Annual Meeting of Stockholders, or the Proxy Statement.

**Code of Business Conduct and Ethics**

We have adopted a code of business conduct and ethics for our directors, officers and employees, which is available on our website at www.t2biosystems.com in the Investor Relations section under "Corporate Governance." If we make any substantive amendments to the code of business conduct and ethics or grant any waiver from a provision of the code of business conduct and ethics to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our website. The information on, or that can be accessed from, our website is not incorporated by reference into this Annual Report.

## Item 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated in this Annual Report by reference from the information under the captions "Executive Compensation," "Compensation Committee Interlocks and Insider Participation" and "Report of the Compensation Committee" contained in the Proxy Statement.

## Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIA L OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is incorporated in this Annual Report by reference from the information under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" contained in the Proxy Statement.

## Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated in this Annual Report by reference from the information under the captions "Certain Relationships and Related Transactions," and "Board of Directors Information" contained in the Proxy Statement.

## Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated in this Annual Report by reference from the information under the captions "Principal Accountant Fees and Services" and "Report of the Audit Committee" contained in the Proxy Statement.

## Item 15. EXHIBITS, FINANCIAL STATEMENTS AND SCHEDULES

a. *Documents filed as part of this Annual Report.*

1. The following financial statements of T2 Biosystems, Inc. and Report of Independent Registered Public Accounting Firm, are included in this report:

Report of Ernst & Young LLP, Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2017 and 2016

Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2017, 2016 and 2015

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017, 2016 and 2015

Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015

Notes to Consolidated Financial Statements

2. List of financial statement schedules. All schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

3. List of Exhibits required by Item 601 of Regulation S-K. See Item 15(b) below.

b. *Exhibits.*

**INDEX TO EXHIBITS**

| Exhibit Number | | Description of Exhibit |
|---|---|---|
| 3.1 | * | Restated Certificate of Incorporation of the Company, as amended (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K (File No. 001-36571) filed on August 12, 2014) |
| 3.2 | * | Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 of the Company's Form 8-K (File No. 001-36571) filed on August 12, 2014) |
| 4.1 | * | Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014) |
| 4.2 | * | Fourth Amended and Restated Investors' Rights Agreement, dated as of March 22, 2013, as amended (incorporated by reference to Exhibit 4.2 of the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014 |
| 10.1 | #* | Amended and Restated 2006 Employee, Director and Consultant Stock Plan, as amended, and form of option agreements thereunder (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1 (File No. 333-197193 filed on July 2, 2014) |
| 10.2 | # | Amended and Restated 2014 Incentive Award Plan and form of option agreements thereunder |
| 10.3 | #* | Non-Employee Director Compensation Program, as amended (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q (File No. 001-36571) filed on August 5, 2015) |
| 10.4 | #* | Form of Indemnification Agreement for Directors and Officers (incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-1/A (File No. 333-197193 filed on July 28, 2014) |
| 10.5 | #* | Employment Letter Agreement, dated as of March 14, 2008, by and between the Company and John McDonough, as amended (incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014) |
| 10.6 | #* | Employment Letter Agreement, dated as of July 22, 2014, by and between the Company and Tom Lowery, Jr. (incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014) |
| 10.7 | #* | Consulting Agreement, dated as of July 20, 2006 by and between the Company and Robert S. Langer, as amended on March 20, 2013 and July 24, 2014 (incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014) |
| 10.8 | *† | Exclusive License Agreement, dated as of November 7, 2006, as amended on December 2, 2008 and February 21, 2011, by and between The General Hospital Corporation d/b/a Massachusetts General Hospital and the Company (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form S-1 (File No. 333-197193) filed on July 2, 2014) |
| 10.9 | * | Commercial Lease, dated as of May 6, 2013, as amended on September 24, 2013, by and between the Company and Columbus Day Realty, Inc. (incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form S-1 (File No. 333-197193) filed on July 2, 2014) |
| 10.10 | * | Lease, dated as of August 6, 2010, by and between the Company and King 101 Hartwell LLC, as amended by the First Amendment to Lease on November 30, 2011 and the Second Amendment to Lease on July 11, 2014 (incorporated by reference to Exhibit 10.17 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 16, 2014) |
| 10.11 | #* | 2014 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.20 to the Company's Registration Statement on Form S-1/A (File No. 333-197193) filed on July 28, 2014) |
| 10.12 | *† | Supply Agreement by and between the Company and SMC Ltd., effective as of October 10, 2014 (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K/A (File No. 001-36571) filed on January 21, 2015) |
| 10.13 | *† | Co-Development Partnership Agreement by and between the Company and Canon U.S. Life Sciences, Inc., dated as of February 3, 2015 (incorporated by reference to Exhibit 10.22 of the Company's Form 10-K (File No. 001-36571) filed on March 4, 2015) |

| | | |
|---|---|---|
| 10.14 | * | Third Amendment to Lease with King 101 Hartwell LLC on May 27, 2015 (incorporated by referenced to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on May 29, 2015) |
| 10.15 | *† | Master Lease Agreement and between the Company and Essex Capital Corporation, dated as of October 31, 2015 (incorporated by reference to Exhibit 10.27 of the Company's Form 10-K (File No. 001-36571) filed on March 9, 2016) |
| 10.16 | #* | Employment Letter Agreement, dated June 30, 2016, by and between the Company and Dr. Joanne Spadoro, Ph. D. (incorporated by reference to Exhibit 10.1 of the Company's Form 10-Q (File No. 001-36571) filed on November 8, 2016) |
| 10.17 | #* | Change of Control Severance Agreement, dated July 7, 2016, by and between the Company and Dr. Joanne Spadoro, Ph. D. (incorporated by reference to Exhibit 10.2 of the Company's Form 10-Q (File No. 001-36571) filed on November 8, 2016) |
| 10.18 | * | Stock Purchase Agreement, dated September 21, 2016, by and among Canon U.S.A., Inc. and the Company (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on September 22, 2016) |
| 10.19 | * | Voting and Standstill Agreement, dated September 21, 2016, by and among Canon U.S.A., Inc. and the Company (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K (File No. 001-36571) filed on September 22, 2016) |
| 10.20 | * | Registration Rights Agreement, dated September 21, 2016, by and among Canon U.S.A., Inc. and the Company (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K (File No. 001-36571) filed on September 22, 2016) |
| 10.21 | † | Co-Development, Collaboration and Co-Marketing Agreement, dated November 1, 2016, by and between the Company and Allergan Sales, LLC |
| 10.22 | † | Term Loan Agreement, dated December 30, 2016, by and among the Company, CRG Servicing LLC, as administrative and collateral agent, and the lenders from time to time party thereto and the subsidiary guarantors from time to time party thereto |
| 10.23 | * | Security Agreement, dated December 30, 2016, by and among the Company, the other grantors from time to time party thereto and CRG Servicing LLC, as administrative and collateral agent |
| 10.24 | * | Warrant to Purchase Shares of Common Stock of T2 Biosystems, Inc., dated December 30, 2016, by and between the Company and CRG Partners III (Cayman) L.P. |
| 10.25 | * | Warrant to Purchase Shares of Common Stock of T2 Biosystems, Inc., dated December 30, 2016, by and between the Company and CRG Partners III - Parallel Fund "A" L.P. |
| 10.26 | * | Warrant to Purchase Shares of Common Stock of T2 Biosystems, Inc., dated December 30, 2016, by and between the Company and CRG Partners III L.P. |
| 10.27 | * | Warrant to Purchase Shares of Common Stock of T2 Biosystems, Inc., dated December 30, 2016, by and between the Company and CRG Partners III Parallel Fund "B" (Cayman) L.P. |
| 10.28 | * | Fourth Amendment to Lease, dated March 2, 2017, by and between the Company and King 101 Harwell LLC (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on March 3, 2017) |
| 10.29 | * | Amendment No. 1 to Term Loan Agreement, dated March 1, 2017, by and among the Company, CRG Servicing LLC, as administrative and collateral agent, and the lenders party thereto (incorporated by reference to Exhibit 10.3 of the Company's Form 10-Q (File No. 001-36571) filed on May 8, 2017) |
| 10.30 | * | Amendment to Co-Development, Collaboration and Co-Marketing Agreement, by and between the Company and Allergan Sales, LLC, dated June 1, 2017 (incorporated by reference to Exhibit 10.3 of the Company's Form 10-Q (File No. 001-36571) filed on August 4, 2017) |
| 10.31 | *† | Amendment to Supply Agreement, by and between the Company and SMC Ltd., dated August 29, 2017 (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on August 29, 2017) |
| 10.32 | * | Second Amendment to Supply Agreement, by and between the Company and SMC Ltd., dated December 22, 2017 (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on December 27, 2017) |
| 10.33 | * | Lease Indenture Agreement, dated September 21, 2017, by and between 91 Hartwell Ave. Trust and the Company (incorporated by reference to Exhibit 10.1 of the Company's Form 10-Q (File No. 001-36571) filed on November 3, 2017) |
| 10.34 | *# | T2 Biosystems, Inc. Inducement Award Plan and form of stock option agreement, form of restricted stock agreement and form of restricted stock unit agreement thereunder (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K (File No. 001-36571) filed on March 7, 2018) |
| 10.35 | # | Employment Offer Letter, dated as of March 7, 2016, by and between the Company and Alex Barclay |

| | | |
|---|---|---|
| 10.36 | # | Change of Control Severance Agreement, dated February 1, 2017, as amended on March 6, 2018, by and between the Company and Alex Barclay |
| 10.37 | # | Amendment to Change of Control Severance Agreement, by and between the Company and Alex Barclay, dated March 6, 2018 |
| 10.38 | # | Employment Offer Letter, dated as of January 30, 2018, by and between the Company and John M. Sprague |
| 10.39 | # | Change of Control Severance Agreement, dated January 30, 2018, by and between the Company and John M. Sprague |
| 10.40 | | Amendment No. 2 to Commercial Lease, dated as of September 21, 2015,, by and between the Company and Columbus Day Realty, Inc. |
| 10.41 | | Amendment No. 3 to Commercial Lease, dated as of August 10, 2017, by and between the Company and Columbus Day Realty, Inc. |
| 10.42 | | Amendment No. 2 to Term Loan Agreement, dated December 18, 2017, by and among the Company, CRG Servicing LLC, as administrative and collateral agent, and the lenders party thereto |
| 10.43 | | Amendment No. 3 to Term Loan Agreement, dated March 16, 2018, by and among the Company, CRG Servicing LLC, as administrative and collateral agent, and the lenders party thereto |
| 10.44 | # | Amendment Number Three to Consulting Agreement, by and between the Company and Robert S. Langer, dated as of October 13, 2017 |
| 10.45 | # | Employment Offer Letter, dated as of April 16, 2017, by and between the Company and Darlene Deptula-Hicks |
| 10.46 | # | Change of Control Severance Agreement, dated April 16, 2017, by and between the Company and Darlene Deptula-Hicks |
| 21.1 | | Subsidiaries of the Registrant |
| 23.1 | | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm |
| 24.1 | | Power of Attorney (included on the signature page hereto). |
| 31.1 | | Certification of principal executive officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended. |
| 31.2 | | Certification of principal financial officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended. |
| 32.1 | | Certification of the principal executive and financial officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. section 1350. |
| 101 | | Interactive Data Files regarding (a) our Consolidated Balance Sheets as of December 31, 2016 and 2015 (b) our Consolidated Statements of Operations and Comprehensive Loss for the Years Ended December 31, 2016, 2015 and 2014, (c) our Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) for the Years Ended December 31, 2016, 2015 and 2014, (d) our Consolidated Statements of Cash Flows for the Years Ended December 31, 2016, 2015 and 2014 and (e) the Notes to such Consolidated Financial Statements. |

* Previously filed.

\# Indicates management contract or compensatory plan.

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment pursuant to Rule 406 under the Securities Act of 1933, or the Securities Act.

** As provided in Rule 406T of Regulation S-T, this information is furnished and not filed for purposes of Sections 11 and 12 of the Securities Act and Section 18 of the Securities Exchange Act of 1934.

The exhibits listed in the accompanying "Exhibit Index" are filed, furnished or incorporated by reference as part of this Annual Report, as indicated.

**SIGNATURES**

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 19, 2018.

T2 BIOSYSTEMS, INC.

By: /S/ JOHN MCDONOUGH
**Name: John McDonough**
**Title: President, Chief Executive Officer and Director (principal executive officer)**

March 19, 2018

By: /S/ JOHN M. SPRAGUE
**Name: John M. Sprague**
**Title: Chief Financial Officer (principal financial officer and principal accounting officer)**

March 19, 2018

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John McDonough and John Sprague, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

| Signature | Title | Date |
|---|---|---|
| / S / JOHN MCDONOUGH<br>**John McDonough** | President, Chief Executive Officer and Director (principal executive officer) | March 19, 2018 |
| / S / JOHN M. SPRAGUE<br>**John M. Sprague** | Chief Financial Officer (principal accounting officer) | March 19, 2018 |
| / S / STANLEY N. LAPIDUS<br>**Stanley N. Lapidus** | Director | March 19, 2018 |
| / S / ADRIAN M. JONES<br>**Adrian M. Jones** | Director | March 19, 2018 |
| / S / MICHAEL J. CIMA, PH.D.<br>**Michael J. Cima, Ph.D.** | Director | March 19, 2018 |
| / S / JOHN W. CUMMING<br>**John W. Cumming** | Director | March 19, 2018 |
| / S / DAVID B. ELSBREE<br>**David B. Elsbree** | Director | March 19, 2018 |
| / S / SEYMOUR LIEBMAN<br>**Seymour Liebman** | Director | March 19, 2018 |

**EXHIBIT 10.2**

**T2 BIOSYSTEMS, INC.**
**2014 INCENTIVE AWARD PLAN**
(as amended and restated effective June 17, 2016)

## ARTICLE 1.

## PURPOSE

The purpose of the T2 Biosystems, Inc. 2014 Incentive Award Plan (as it may be amended or restated from time to time, the "Plan") is to promote the success and enhance the value of T2 Biosystems, Inc. (the "Company") by linking the individual interests of the members of the Board, Employees, and Consultants to those of Company stockholders and by providing such individuals with an incentive for outstanding performance to generate superior returns to Company stockholders. The Plan is further intended to provide flexibility to the Company in its ability to motivate, attract, and retain the services of members of the Board, Employees, and Consultants upon whose judgment, interest, and special effort the successful conduct of the Company's operation is largely dependent. This Plan constitutes an amendment and restatement of the T2 Biosystems, Inc. 2014 Incentive Award Plan (the "Original Plan").

## ARTICLE 2.

## DEFINITIONS AND CONSTRUCTION

Wherever the following terms are used in the Plan they shall have the meanings specified below, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates.

2.1 "Administrator" shall mean the entity that conducts the general administration of the Plan as provided in Article 12. With reference to the duties of the Committee under the Plan which have been delegated to one or more persons pursuant to Section 12.6, or as to which the Board has assumed, the term "Administrator" shall refer to such person(s) unless the Committee or the Board has revoked such delegation or the Board has terminated the assumption of such duties.

2.2 "Applicable Accounting Standards" shall mean Generally Accepted Accounting Principles in the United States, International Financial Reporting Standards or such other accounting principles or standards as may apply to the Company's financial statements under United States federal securities laws from time to time.

2.3 "Applicable Law" shall mean any applicable law, including without limitation: (i) provisions of the Code, the Securities Act, the Exchange Act and any rules or regulations thereunder; (ii) corporate, securities, tax or other laws, statutes, rules, requirements or regulations, whether federal, state, local or foreign; and (iii) rules of any securities exchange or automated quotation system on which the Shares are listed, quoted or traded.

2.4 "Automatic Exercise Date" shall mean, with respect to an Option or a Stock Appreciation Right, the last business day of the applicable Option Term or Stock Appreciation

Right Term that was established by the Administrator for such Option or Stock Appreciation Right ( *e.g.*, the last business day prior to the tenth anniversary of the date of grant of such Option or Stock Appreciation Right if the Option or Stock Appreciation Right initially had a ten-year Option Term or Stock Appreciation Right Term, as applicable) ; provided that with respect to an Option or Stock Appreciation Right that has been amended pursuant to this Plan so as to alter the applicable Option Term or Stock Appreciation Right Term, "Automatic Exercise Date" shall mean the last business day of the applicable Option Term or Stock Appreciation Right Term that was established by the Administrator for such Option or Stock Appreciation Right as amended.

2.5 "Award" shall mean an Option, a Restricted Stock award, a Restricted Stock Unit award, a Performance Award, a Dividend Equivalents award, a Stock Payment award or a Stock Appreciation Right, which may be awarded or granted under the Plan (collectively, "Awards").

2.6 "Award Agreement" shall mean any written notice, agreement, terms and conditions, contract or other instrument or document evidencing an Award, including through electronic medium, which shall contain such terms and conditions with respect to an Award as the Administrator shall determine consistent with the Plan.

2.7 "Award Limit" shall mean with respect to Awards that shall be payable in Shares or in cash, as the case may be, the respective limit set forth in Section 3.4.

2.8 "Board" shall mean the Board of Directors of the Company.

2.9 "Change in Control" shall mean and includes each of the following:

(a) A transaction or series of transactions (other than an offering of Common Stock to the general public through a registration statement filed with the Securities and Exchange Commission or a transaction or series of transactions that meets the requirements of clause (i) and (ii) of paragraph (c) below) whereby any "person" or related "group" of "persons" (as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act) (other than the Company, any of its Subsidiaries, an employee benefit plan maintained by the Company or any of its Subsidiaries or a "person" that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of securities of the Company possessing more than 50% of the total combined voting power of the Company's securities outstanding immediately after such acquisition; or

(b) During any period of two consecutive years, individuals who, at the beginning of such period, constitute the Board together with any new Director(s) (other than a Director designated by a person who shall have entered into an agreement with the Company to effect a transaction described in Section 2.9(a) or Section 2.9(c)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the Directors then still in office who either were Directors at the beginning of the two-year period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; or

(c) The consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of the Company's assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction:

(i) which results in the Company's voting securities outstanding immediately before the transaction continuing to represent (either by remaining outstanding or by being converted into voting securities of the Company or the person that, as a result of the transaction, controls, directly or indirectly, the Company or owns, directly or indirectly, all or substantially all of the Company's assets or otherwise succeeds to the business of the Company (the Company or such person, the "Successor Entity")) directly or indirectly, at least a majority of the combined voting power of the Successor Entity's outstanding voting securities immediately after the transaction, and

(ii) after which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the Successor Entity; provided, however, that no person or group shall be treated for purposes of this Section 2.9(c)(ii) as beneficially owning 50% or more of the combined voting power of the Successor Entity solely as a result of the voting power held in the Company prior to the consummation of the transaction.

In addition, if a Change in Control constitutes a payment event with respect to any portion of an Award that provides for the deferral of compensation and is subject to Section 409A of the Code, the transaction or event described in subsection (a), (b), (c) or (d) with respect to such Award (or portion thereof) must also constitute a "change in control event," as defined in Treasury Regulation Section 1.409A-3(i)(5) to the extent required by Section 409A.

The Committee shall have full and final authority, which shall be exercised in its discretion, to determine conclusively whether a Change in Control of the Company has occurred pursuant to the above definition, and the date of the occurrence of such Change in Control and any incidental matters relating thereto; provided that any exercise of authority in conjunction with a determination of whether a Change in Control is a "change in control event" as defined in Treasury Regulation Section 1.409A-3(i)(5) shall be consistent with such regulation.

2.10 "Code" shall mean the Internal Revenue Code of 1986, as amended from time to time, together with the regulations and official guidance promulgated thereunder.

2.11 "Committee" shall mean the Compensation Committee of the Board, or another committee or subcommittee of the Board or the Compensation Committee, appointed as provided in Section 12.1.

2.12 "Common Stock" shall mean the common stock of the Company, par value $0.001 per share.

2.13 "Company" shall have the meaning set forth in Article 1.

2.14 "Consultant" shall mean any consultant or adviser engaged to provide services to the Company or any Subsidiary that qualifies as a consultant under the applicable rules of the Securities and Exchange Commission for registration of shares on a Form S-8 Registration Statement.

2.15 "Covered Employee" shall mean any Employee who is, or could become, a "covered employee" within the meaning of Section 162(m) of the Code.

2.16 "Director" shall mean a member of the Board, as constituted from time to time.

2.17 "Dividend Equivalent" shall mean a right to receive the equivalent value (in cash or Shares) of dividends paid on Shares, awarded under Section 9.2.

2.18 "DRO" shall mean a domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act of 1974, as amended from time to time, or the rules thereunder.

2.19 "Effective Date" shall mean the day prior to the Public Trading Date.

2.20 "Eligible Individual" shall mean any person who is an Employee, a Consultant or a Non-Employee Director, as determined by the Committee.

2.21 "Employee" shall mean any officer or other employee (as determined in accordance with Section 3401(c) of the Code) of the Company or of any Subsidiary.

2.22 "Equity Restructuring" shall mean a nonreciprocal transaction between the Company and its stockholders, such as a stock dividend, stock split, spin-off, rights offering or recapitalization through a large, nonrecurring cash dividend, that affects the number or kind of Shares (or other securities of the Company) or the share price of Common Stock (or other securities) and causes a change in the per share value of the Common Stock underlying outstanding Awards.

2.23 "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended from time to time.

2.24 "Expiration Date" shall have the meaning given to such term in Section 13.1.

2.25 "Fair Market Value" shall mean, as of any given date, the value of a Share determined as follows:

(a) If the Common Stock is listed on any (i) established securities exchange (such as the New York Stock Exchange, the NASDAQ Global Market and the NASDAQ Global Select Market), (ii) national market system or (iii) automated quotation system, its Fair Market Value shall be the closing sales price for a Share as quoted on such exchange or system for such date or, if there is no closing sales price for a Share on the date in question, the closing sales price for a Share on the last preceding date for which such quotation exists, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(b) If the Common Stock is not listed on an established securities exchange, national market system or automated quotation system, but the Common Stock is regularly quoted by a recognized securities dealer, its Fair Market Value shall be the mean of the high bid and low asked prices for such date or, if there are no high bid and low asked prices for a Share on such date, the high bid and low asked prices for a Share on the last preceding date for which such information exists, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(c) If the Common Stock is neither listed on an established securities exchange, national market system or automated quotation system nor regularly quoted by a recognized securities dealer, its Fair Market Value shall be established by the Administrator in good faith.

Notwithstanding the foregoing, with respect to any Award granted after the effectiveness of the Company's registration statement relating to its initial public offering and prior to the Public Trading Date, the Fair Market Value shall mean the initial public offering price of a Share as set forth in the Company's final prospectus relating to its initial public offering filed with the Securities and Exchange Commission.

2.26 "Greater Than 10% Stockholder" shall mean an individual then owning (within the meaning of Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of stock of the Company or any subsidiary corporation (as defined in Section 424(f) of the Code) or parent corporation thereof (as defined in Section 424(e) of the Code).

2.27 "Holder" shall mean a person who has been granted an Award.

2.28 "Incentive Stock Option" shall mean an Option that is intended to qualify as an incentive stock option and conforms to the applicable provisions of Section 422 of the Code.

2.29 "Non-Employee Director" shall mean a Director of the Company who is not an Employee.

2.30 "Non-Employee Director Equity Compensation Policy" shall have the meaning set forth in Section 4.5.

2.31 "Non-Qualified Stock Option" shall mean an Option that is not an Incentive Stock Option.

2.32 "Option" shall mean a right to purchase Shares at a specified exercise price, granted under Article 6. An Option shall be either a Non-Qualified Stock Option or an Incentive Stock Option; provided, however, that Options granted to Non-Employee Directors and Consultants shall only be Non-Qualified Stock Options.

2.33 "Option Term" shall have the meaning set forth in Section 6.6.

2.34 "Parent" shall mean any entity (other than the Company), whether domestic or foreign, in an unbroken chain of entities ending with the Company if each of the entities other than the Company beneficially owns, at the time of the determination, securities or interests

representing at least fifty percent (50%) of the total combined voting power of all classes of securities or interests in one of the other entities in such chain.

2.35 "Performance Award" shall mean a cash bonus award, stock bonus award, performance award or other incentive award that is paid in cash, Shares or a combination of both, awarded under Section 9.1.

2.36 "Performance-Based Compensation" shall mean any compensation that is intended to qualify as "performance-based compensation" as described in Section 162(m)(4)(C) of the Code.

2.37 "Performance Criteria" shall mean the criteria (and adjustments) that the Committee selects for an Award for purposes of establishing the Performance Goal or Performance Goals for a Performance Period, determined as follows:

(a) The Performance Criteria that shall be used to establish Performance Goals are limited to: (i) net earnings (either before or after one or more of (A) interest, (B) taxes, (C) depreciation, (D) amortization and (E) non-cash equity-based compensation expense); (ii) gross or net sales or revenue; (iii) net income (either before or after taxes); (iv) adjusted net income; (v) operating earnings or profit (either before or after taxes); (vi) cash flow (including, but not limited to, operating cash flow and free cash flow) and cash flow return on capital; (vii) return on assets; (viii) return on capital (or invested capital) and cost of capital); (ix) return on stockholders' equity; (x) total stockholder return; (xi) return on sales; (xii) gross or net profit or operating margin; (xiii) costs, reductions in costs and cost control measures; (xiv) expenses; (xv) working capital; (xvi) earnings or loss per share; (xvii) adjusted earnings or loss per share; (xviii) price per share or dividends per share (or appreciation in and/or maintenance of such price or dividends); (xix) regulatory achievements or compliance (including, without limitation, regulatory body approval for commercialization of a product); (xx) implementation, completion or attainment of objectives relating to research, development, regulatory, commercial, or strategic milestones or developments of critical projects; (xxi) market share; (xxii) economic value; (xxiii) revenue; (xxiv) revenue growth; (xxv) productivity; (xxvi) operating efficiency; (xxvii) economic value-added; (xxviii) return on net assets; (xxix) funds from operations; (xxx) funds available for distributions; (xxxi) sales unit volume; (xxxii) licensing revenue; (xxxiii) brand recognition and acceptance; (xxxiv) inventory, inventory turns or cycle time; (xxxv) market penetration and geographic business expansion; (xxxvi) customer satisfaction/growth and customer service; (xxxvii) employee satisfaction, recruitment and maintenance of personnel, and human resources management; (xxxviii) supervision of litigation and other legal matters; (xxxix) strategic partnerships and transactions; (xxxx) financial ratios (including those measuring liquidity, activity, profitability or leverage); (xxxxi) supply chain achievements; (xxxxii) debt levels or reductions; (xxxxiii) sales-related goals; (xxxxiv) financing and other capital raising transactions; (xxxxv) year-end cash; (xxxxvi) acquisition activity; (xxxxvii) investment sourcing activity; and (xxxxiii) marketing initiatives, any of which may be measured either in absolute terms or as compared to any incremental increase or decrease or as compared to results of a peer group or to market performance indicators or indices.

(b) The Committee, in its discretion, may provide that one or more objectively determinable adjustments shall be made to one or more of the Performance Goals. Such

adjustments may include, but are not limited to, one or more of the following: (i) items related to a change in Applicable Accounting Standards; (ii) items relating to financing activities; (iii) expenses for restructuring or productivity initiatives; (iv) other non-operating items; (v) items related to acquisitions; (vi) items attributable to the business operations of any entity acquired by the Company during the Performance Period; (vii) items related to the sale or disposition of a business or segment of a business; (viii) items related to discontinued operations that do not qualify as a segment of a business under Applicable Accounting Standards; (ix) items attributable to any stock dividend, stock split, combination or exchange of stock occurring during the Performance Period; (x) any other items of significant income or expense which are determined to be appropriate adjustments; (xi) items relating to unusual or extraordinary corporate transactions, events or developments, (xii) items related to amortization of acquired intangible assets; (xiii) items that are outside the scope of the Company's core, on-going business activities; (xiv) items related to acquired in-process research and development; (xv) items relating to changes in tax laws; (xvi) items relating to major licensing or partnership arrangements; (xvii) items relating to asset impairment charges; (xviii) items relating to gains or losses for litigation, arbitration and contractual settlements; (xix) items attributable to expenses incurred in connection with a reduction in force or early retirement initiative; (xx) items relating to foreign exchange or currency transactions and/or fluctuations; or (xxi) items relating to any other unusual or nonrecurring events or changes in Applicable Law, Applicable Accounting Standards or business conditions. For all Awards intended to qualify as Performance-Based Compensation, such determinations shall be made within the time prescribed by, and otherwise in compliance with, Section 162(m) of the Code.

2.38 "Performance Goals" shall mean, for a Performance Period, one or more goals established in writing by the Administrator for the Performance Period based upon one or more Performance Criteria. Depending on the Performance Criteria used to establish Performance Goals, Performance Goals may be expressed in terms of overall Company performance or the performance of a Subsidiary, division, business unit, or an individual. The achievement of each Performance Goal shall be determined, to the extent applicable, with reference to Applicable Accounting Standards.

2.39 "Performance Period" shall mean one or more periods of time, which may be of varying and overlapping durations, as the Administrator may select, over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Holder's right to, and the payment of, an Award.

2.40 "Performance Stock Unit" shall mean a Performance Award awarded under Section 9.1 which is denominated in units of value including dollar value of Shares.

2.41 "Permitted Transferee" shall mean, with respect to a Holder, any "family member" of the Holder, as defined in the instructions to use the Form S-8 Registration Statement under the Securities Act, or any other transferee specifically approved by the Administrator after taking into account Applicable Law.

2.42 "Plan" shall have the meaning set forth in Article 1.

2.43 "Prior Plan" shall mean the T2 Biosystems, Inc. Amended and Restated 2006 Employee, Director and Consultant Stock Plan, as such plan may be amended from time to time.

2.44 "Public Trading Date" shall mean the first date upon which Common Stock is listed (or approved for listing) upon notice of issuance on any securities exchange or designated (or approved for designation) upon notice of issuance as a national market security on an interdealer quotation system.

2.45 "Restricted Stock" shall mean Common Stock awarded under Article 7 that is subject to certain restrictions and may be subject to risk of forfeiture or repurchase.

2.46 "Restricted Stock Unit" shall mean the right to receive Shares awarded under Article 8.

2.47 "Securities Act" shall mean the Securities Act of 1933, as amended.

2.48 "Shares" shall mean shares of Common Stock.

2.49 "Stock Appreciation Right" shall mean a stock appreciation right granted under Article 10.

2.50 "Stock Appreciation Right Term" shall have the meaning set forth in Section 10.4.

2.51 "Stock Payment" shall mean (a) a payment in the form of Shares, or (b) an option or other right to purchase Shares, as part of a bonus, deferred compensation or other arrangement, awarded under Section 9.3.

2.52 "Subsidiary" shall mean any entity (other than the Company), whether domestic or foreign, in an unbroken chain of entities beginning with the Company if each of the entities other than the last entity in the unbroken chain beneficially owns, at the time of the determination, securities or interests representing at least 50% of the total combined voting power of all classes of securities or interests in one of the other entities in such chain.

2.53 "Substitute Award" shall mean an Award granted under the Plan upon the assumption of, or in substitution for, outstanding equity awards granted by a company or other entity in connection with a corporate transaction, such as a merger, combination, consolidation or acquisition of property or stock; provided, however, that in no event shall the term "Substitute Award" be construed to refer to an award made in connection with the cancellation and repricing of an Option or Stock Appreciation Right.

2.54 "Termination of Service" shall mean:

(a) As to a Consultant, the time when the engagement of a Holder as a Consultant to the Company or a Subsidiary is terminated for any reason, with or without cause, including, without limitation, by resignation, discharge, death, disability or retirement, but excluding terminations where the Consultant simultaneously commences or remains in employment or service with the Company or any Subsidiary.

(b) As to a Non-Employee Director, the time when a Holder who is a Non-Employee Director ceases to be a Director for any reason, including, without limitation, a termination by resignation, failure to be elected, death, disability or retirement, but excluding terminations where the Holder simultaneously commences or remains in employment or service with the Company or any Subsidiary.

(c) As to an Employee, the time when the employee-employer relationship between a Holder and the Company or any Subsidiary is terminated for any reason, including, without limitation, a termination by resignation, discharge, death, disability or retirement; but excluding terminations where the Holder simultaneously commences or remains in employment or service with the Company or any Subsidiary.

The Administrator, in its discretion, shall determine the effect of all matters and questions relating to any Termination of Service, including, without limitation, the question of whether a Termination of Service resulted from a discharge for cause and all questions of whether particular leaves of absence constitute a Termination of Service; provided, however, that, with respect to Incentive Stock Options, unless the Administrator otherwise provides in the terms of the Award Agreement or otherwise, or as otherwise required by Applicable Law, a leave of absence, change in status from an employee to an independent contractor or other change in the employee-employer relationship shall constitute a Termination of Service only if, and to the extent that, such leave of absence, change in status or other change interrupts employment for the purposes of Section 422(a)(2) of the Code. For purposes of the Plan, a Holder's employee-employer relationship or consultancy relations shall be deemed to be terminated in the event that the Subsidiary employing or contracting with such Holder ceases to remain a Subsidiary following any merger, sale of stock or other corporate transaction or event (including, without limitation, a spin-off).

## ARTICLE 3.

## SHARES SUBJECT TO THE PLAN

3.1 Number of Shares.

(a) Subject to Sections 3.1(b) and 13.2, the aggregate number of Shares which may be issued or transferred pursuant to Awards under the Plan is the sum of: (i) 823,529 Shares, (ii) any Shares which as of the Effective Date are subject to awards granted under the Prior Plan which are forfeited, lapse unexercised or are settled in cash and which following the Effective Date are not issued under the Prior Plan; and (iii) an annual increase on the first day of each calendar year beginning January 1, 2015 and ending on and including January 1, 2026, equal to the lesser of (A) 4% of the Shares outstanding (on an as-converted basis) on the final day of the immediately preceding calendar year and (B) such smaller number of Shares as determined by the Board; provided, however, no more than 8,235,294 Shares may be issued upon the exercise of Incentive Stock Options. From and after the Effective Date, no awards shall be granted under the Prior Plan. Any award outstanding under the Prior Plan as of the Effective Date shall continue to be subject to the terms and conditions of the Prior Plan.

(b) To the extent all or a portion of an Award is forfeited, expires, lapses for any reason, or is settled for cash without the delivery of Shares to the Holder, any Shares subject

to such Award or portion thereof shall, to the extent of such forfeiture, expiration, lapse or cash settlement, again be available for the grant of an Award under the Plan. Any Shares repurchased by or surrendered to the Company under Section 7.4 so that such Shares are returned to the Company shall again be available for the grant of an Award under the Plan. The payment of Dividend Equivalents in cash in conjunction with any outstanding Awards shall not be counted against the Shares available for issuance under the Plan. Notwithstanding the provisions of this Section 3.1(b), no Shares may again be optioned, granted or awarded if such action would cause an Incentive Stock Option to fail to qualify as an incentive stock option under Section 422 of the Code.

(c) To the extent permitted by Applicable Law, Substitute Awards shall not reduce the Shares authorized for grant under the Plan.

3.2 Stock Distributed. Any Shares distributed pursuant to an Award may consist, in whole or in part, of authorized and unissued Common Stock, treasury Common Stock or Common Stock purchased on the open market.

3.3 Limitation on Awards to Non-Employee Directors. Notwithstanding any provision to the contrary in the Plan, the Administrator may establish compensation for Non-Employee Directors from time to time, subject to the limitations in the Plan. The Administrator will from time to time determine the terms, conditions and amounts of all such Non-Employee Director compensation in its discretion and pursuant to the exercise of its business judgment, taking into account such factors, circumstances and considerations as it shall deem relevant from time to time, provided that the sum of any cash compensation, or other compensation, and the value (determined as of the grant date in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, or any successor thereto) of Awards granted to a Non-Employee Director as compensation for services as a Non-Employee Director during any fiscal year of the Company may not exceed $600,000, increased to $900,000 in the fiscal year of a Non-Employee Director's initial service as a Non-Employee Director. The Administrator may make exceptions to this limit for individual Non-Employee Directors in extraordinary circumstances, as the Administrator may determine in its discretion, provided that the Non-Employee Director receiving such additional compensation may not participate in the decision to award such compensation or in other contemporaneous compensation decisions involving Non-Employee Directors.

3.4 Limitation on Number of Shares Subject to Awards. Notwithstanding any provision in the Plan to the contrary, and subject to Section 13.2, the maximum aggregate number of Shares that may be issued with respect to Awards granted to any one person during a given calendar year shall be 1,000,000 and the maximum aggregate amount of cash that may be paid with respect to Awards granted to any one person during a given calendar year shall be $2,000,000. To the extent required by Section 162(m) of the Code, Shares subject to Awards which are canceled shall continue to be counted against the Award Limit.

## ARTICLE 4.

## GRANTING OF AWARDS

4.1 Participation. The Administrator may, from time to time, select from among all Eligible Individuals, those to whom an Award shall be granted and shall determine the nature and amount of each Award , which shall not be inconsistent with the requirements of the Plan. Except as provided in Section 4.5 regarding the grant of Awards pursuant to the Non-Employee Director Equity Compensation Policy, no Eligible Individual shall have any right to be granted an Award pursuant to the Plan.

4.2 Award Agreement. Each Award shall be evidenced by an Award Agreement that sets forth the terms, conditions and limitations for such Award, which may include the term of the Award, the provisions applicable in the event of the Holder's Termination of Service, and the Company's authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind an Award. Award Agreements evidencing Awards intended to qualify as Performance-Based Compensation shall contain such terms and conditions as may be necessary to meet the applicable provisions of Section 162(m) of the Code. Award Agreements evidencing Incentive Stock Options shall contain such terms and conditions as may be necessary to meet the applicable provisions of Section 422 of the Code.

4.3 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan, the Plan, and any Award granted or awarded to any individual who is then subject to Section 16 of the Exchange Act, shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including Rule 16b-3 of the Exchange Act and any amendments thereto) that are requirements for the application of such exemptive rule. To the extent permitted by Applicable Law, the Plan and Awards granted or awarded hereunder shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

4.4 At-Will Employment; Voluntary Participation . Nothing in the Plan or Award Agreement shall confer upon any Holder any right to continue in the employ of, or as a Director or Consultant for, the Company or any Subsidiary, or shall interfere with or restrict in any way the rights of the Company and any Subsidiary, which rights are hereby expressly reserved, to discharge any Holder at any time for any reason whatsoever, with or without cause, and with or without notice, or to terminate or change all other terms and conditions of employment or engagement, except to the extent expressly provided otherwise in a written agreement between the Holder and the Company or any Subsidiary. Participation by each Holder in the Plan shall be voluntary and nothing in the Plan shall be construed as mandating that any Eligible Individual shall participate in the Plan.

4.5 Non-Employee Director Awards. The Administrator, in its discretion, may provide that Awards granted to Non-Employee Directors shall be granted pursuant to a written nondiscretionary formula established by the Administrator (the "Non-Employee Director Equity Compensation Policy"), subject to the limitations of the Plan. The Non-Employee Director Equity Compensation Policy shall set forth the type of Award(s) to be granted to Non-Employee Directors, the number of Shares to be subject to Non-Employee Director Awards, the conditions on which such Awards shall be granted, become exercisable and/or payable and expire, and such other terms and conditions as the Administrator shall determine in its discretion. The Non-Employee Director Equity Compensation Policy may be modified by the Administrator from time to time in its discretion.

4.6 Stand-Alone and Tandem Awards. Awards granted pursuant to the Plan may, in the discretion of the Administrator, be granted either alone, in addition to, or in tandem with, any other Award granted pursuant to the Plan. Awards granted in addition to or in tandem with other Awards may be granted either at the same time as or at a different time from the grant of such other Awards.

## ARTICLE 5.

## PROVISIONS APPLICABLE TO AWARDS INTENDED TO QUALIFY AS PERFORMANCE-BASED COMPENSATION

5.1 Purpose. The Committee may, in its discretion, (a) determine whether an Award is intended to qualify as Performance-Based Compensation and (b) at any time after any such determination, alter such intent for any or no reason. If the Committee, in its discretion, decides to grant an Award that is intended to qualify as Performance-Based Compensation (other than an Option or Stock Appreciation Right), then the provisions of this Article 5 shall control over any contrary provision contained in the Plan; provided that, if after such decision the Committee alters such intention for any reason, the provisions of this Article 5 shall no longer control over any other provision contained in the Plan. The Committee, in its discretion, may (i) grant Awards to Eligible Individuals that are based on Performance Criteria or Performance Goals or any such other criteria and goals as the Committee shall establish, but that do not satisfy the requirements of this Article 5 and that are not intended to qualify as Performance-Based Compensation and (ii) subject any Awards intended to qualify as Performance-Based Compensation to additional conditions and restrictions unrelated to any Performance Criteria or Performance Goals (including, without limitation, continued employment or service requirements) to the extent such Awards otherwise satisfy the requirements of this Article 5 with respect to the Performance Criteria and Performance Goals applicable thereto. Unless otherwise specified by the Committee at the time of grant, the Performance Criteria with respect to an Award intended to be Performance-Based Compensation payable to a Covered Employee shall be determined on the basis of Applicable Accounting Standards.

5.2 Procedures with Respect to Performance-Based Awards. To the extent necessary to comply with the requirements of Section 162(m)(4)(C) of the Code, with respect to any Award which is intended to qualify as Performance-Based Compensation, no later than 90 days following the commencement of any Performance Period or any designated fiscal period or period of service (or such earlier time as may be required under Section 162(m) of the Code), the Committee shall, in writing, (a) designate one or more Eligible Individuals, (b) select the Performance Criteria applicable to the Performance Period, (c) establish the Performance Goals, and amounts of such Awards, as applicable, which may be earned for such Performance Period based on the Performance Criteria, and (d) specify the relationship between Performance Criteria and the Performance Goals and the amounts of such Awards, as applicable, to be earned by each Covered Employee for such Performance Period. Following the completion of each Performance Period, the Committee shall certify in writing whether and the extent to which the applicable Performance Goals have been achieved for such Performance Period. In determining the amount earned under such Awards, the Committee (i) shall, unless otherwise provided in an Award Agreement, have the right to reduce or eliminate the amount payable at a given level of performance to take into account additional factors that the Committee may deem relevant, including the assessment of

individual or corporate performance for the Performance Period, but (ii) shall in no event have the right to increase the amount payable for any reason.

5.3 Payment of Performance-Based Awards. Unless otherwise provided in the applicable Award Agreement and only to the extent otherwise permitted by Section 162(m) of the Code, as to an Award that is intended to qualify as Performance-Based Compensation, the Holder must be employed by the Company or a Subsidiary throughout the Performance Period. Unless otherwise provided in the applicable Award Agreement, a Holder shall be eligible to receive payment pursuant to such Awards for a Performance Period only if and to the extent the Performance Goals for such Performance Period are achieved.

5.4 Additional Limitations. Notwithstanding any other provision of the Plan and except as otherwise determined by the Administrator, any Award which is granted to an Eligible Individual and is intended to qualify as Performance-Based Compensation shall be subject to any additional limitations set forth in Section 162(m) of the Code or any regulations or rulings issued thereunder that are requirements for qualification as Performance-Based Compensation, and the Plan and the applicable Award Agreement shall be deemed amended to the extent necessary to conform to such requirements.

## ARTICLE 6.

## OPTIONS

6.1 Granting of Options to Eligible Individuals. The Administrator is authorized to grant Options to Eligible Individuals from time to time, in its discretion, on such terms and conditions as it may determine, which shall not be inconsistent with the Plan.

6.2 Option Exercise Price. The exercise price per Share subject to each Option shall be set by the Administrator, but shall not be less than 100% of the Fair Market Value of a Share on the date the Option is granted (or, as to Incentive Stock Options, on the date the Option is modified, extended or renewed for purposes of Section 424(h) of the Code) unless otherwise determined by the Administrator. In addition, in the case of Incentive Stock Options granted to a Greater Than 10% Stockholder, such price shall not be less than 110% of the Fair Market Value of a Share on the date the Option is granted (or the date the Option is modified, extended or renewed for purposes of Section 424(h) of the Code).

6.3 Option Vesting.

(a) The period during which the right to exercise, in whole or in part, an Option vests in the Holder shall be set by the Administrator and the Administrator may determine that an Option may not be exercised in whole or in part for a specified period after it is granted. Such vesting may be based on service with the Company or any Subsidiary or any other criteria selected by the Administrator, including Performance Goals or Performance Criteria. At any time after the grant of an Option, the Administrator, in its discretion and subject to whatever terms and conditions it selects, may accelerate the period during which an Option vests.

(b) No portion of an Option which is unexercisable at a Holder's Termination of Service shall thereafter become exercisable, except as may be otherwise provided by the

Administrator either in the Award Agreement evidencing the grant of an Option or by action of the Administrator following the grant of the Option. Unless otherwise determined by the Administrator in the Award Agreement or by action of the Administrator following the grant of the Option, the portion of an Option that is unexercisable at a Holder's Termination of Service shall automatically expire thirty (30) days following such Termination of Service.

6.4 Manner of Exercise. All or a portion of an exercisable Option shall be deemed exercised upon delivery of all of the following to the Secretary of the Company, the stock administrator of the Company or such other person or entity designated by the Administrator, or his, her or its office, as applicable:

(a) A written or electronic notice complying with the applicable rules established by the Administrator stating that the Option, or a portion thereof, is exercised. The notice shall be signed by the Holder or other person then entitled to exercise the Option or such portion of the Option.

(b) Such representations and documents as the Administrator, in its discretion, deems necessary or advisable to effect compliance with Applicable Law. The Administrator may, in its discretion, also take whatever additional actions it deems appropriate to effect such compliance including, without limitation, placing legends on share certificates and issuing stop-transfer notices to agents and registrars.

(c) In the event that the Option shall be exercised by any person or persons other than the Holder, appropriate proof of the right of such person or persons to exercise the Option, as determined in the discretion of the Administrator.

(d) Full payment of the exercise price and applicable withholding taxes for the shares with respect to which the Option, or portion thereof, is exercised, in a manner permitted by Section 11.1 and Section 11.2.

6.5 Partial Exercise. An exercisable Option may be exercised in whole or in part. However, an Option shall not be exercisable with respect to fractional Shares unless otherwise determined by the Administrator and the Administrator may require that, by the terms of the Option, a partial exercise must be with respect to a minimum number of shares.

6.6 Option Term. The term of each Option (the "Option Term") shall be set by the Administrator in its discretion; provided, however, that the Option Term shall not be more than ten (10) years from the date the Option is granted, or five (5) years from the date an Incentive Stock Option is granted to a Greater Than 10% Stockholder. The Administrator shall determine the time period, including the time period following a Termination of Service, during which the Holder has the right to exercise the vested Options, which time period may not extend beyond the last day of the Option Term. Except as limited by the requirements of Section 409A of the Code or the first sentence of this Section 6.6, the Administrator may extend the Option Term of any outstanding Option, and may extend the time period during which vested Options may be exercised, in connection with any Termination of Service of the Holder, and may amend, subject to Section 13.1, any other term or condition of such Option relating to such a Termination of Service.

6.7 Expiration of Option Term: Automatic Exercise of In-The-Money Options. Unless otherwise determined by the Administrator (in an Award Agreement or otherwise) or as otherwise directed by an Option Holder in writing to the Company, each Option outstanding on the Automatic Exercise Date with an exercise price per share that is less than the Fair Market Value per share of Common Stock as of such date shall automatically and without further action by the Option Holder or the Company be exercised on the Automatic Exercise Date. In the discretion of the Administrator, payment of the exercise price of any such Option shall be made pursuant to Section 11.1(b) or Section 11.1(c) and the Company or any Subsidiary shall deduct or withhold an amount sufficient to satisfy all taxes associated with such exercise in accordance with Section 11.2. Unless otherwise determined by the Administrator, this Section 6.7 shall not apply to an Option if the Holder of such Option incurs a Termination of Service on or before the Automatic Exercise Date. For the avoidance of doubt, no Option with an exercise price per share that is equal to or greater than the Fair Market Value per share of Common Stock on the Automatic Exercise Date shall be exercised pursuant to this Section 6.7.

6.8 Notification Regarding Disposition. The Holder shall give the Company prompt written or electronic notice of any disposition of Shares acquired by exercise of an Incentive Stock Option which occurs within (a) two years from the date of granting (including the date the Option is modified, extended or renewed for purposes of Section 424(h) of the Code) such Option to such Holder, or (b) one year after the transfer of such Shares to such Holder.

## ARTICLE 7.

## RESTRICTED STOCK

7.1 Award of Restricted Stock.

(a) The Administrator is authorized to grant Restricted Stock to Eligible Individuals, and shall determine the terms and conditions, including the restrictions applicable to each award of Restricted Stock, which terms and conditions shall not be inconsistent with the Plan, and may impose such conditions on the issuance of such Restricted Stock as it deems appropriate.

(b) The Administrator shall establish the purchase price, if any, and form of payment for Restricted Stock; provided, however, that if a purchase price is charged, such purchase price shall be no less than the par value, if any, of the Shares to be purchased, unless otherwise permitted by Applicable Law. In all cases, legal consideration shall be required for each issuance of Restricted Stock.

7.2 Rights as Stockholders. Subject to Section 7.4, upon issuance of Restricted Stock, the Holder shall have, unless otherwise provided by the Administrator, all the rights of a stockholder with respect to said Shares, subject to the restrictions in each individual Award Agreement, including the right to receive all dividends and other distributions paid or made with respect to the Shares; provided, however, that, in the discretion of the Administrator, any extraordinary distributions with respect to the Shares shall be subject to the restrictions set forth in Section 7.3.

7.3 Restrictions. All shares of Restricted Stock (including any shares received by Holders thereof with respect to shares of Restricted Stock as a result of stock dividends, stock splits or any other form of recapitalization) shall, in the terms of each individual Award Agreement, be subject to such restrictions and vesting requirements as the Administrator shall provide. Such restrictions may include, without limitation, restrictions concerning voting rights and transferability and such restrictions may lapse separately or in combination at such times and pursuant to such circumstances or based on such criteria as selected by the Administrator, including, without limitation, criteria based on the Holder's duration of employment, directorship or consultancy with the Company, Performance Goals, Performance Criteria, Company performance, individual performance or other criteria selected by the Administrator. By action taken after the Restricted Stock is issued, the Administrator may, on such terms and conditions as it may determine to be appropriate, accelerate the vesting of such Restricted Stock by removing any or all of the restrictions imposed by the terms of the applicable Award Agreement. Unless otherwise determined by the Administrator, Restricted Stock may not be sold or encumbered until all restrictions are terminated or expire.

7.4 Repurchase or Forfeiture of Restricted Stock. Except as otherwise determined by the Administrator at the time of the grant of the Award or thereafter, (a) if no price was paid by the Holder for the Restricted Stock, upon a Termination of Service during the applicable restriction period, the Holder's rights in unvested Restricted Stock then subject to restrictions shall lapse, and such Restricted Stock shall be surrendered to the Company and cancelled without consideration, and (b) if a price was paid by the Holder for the Restricted Stock, upon a Termination of Service during the applicable restriction period, the Company shall have the right to repurchase from the Holder the unvested Restricted Stock then subject to restrictions at a cash price per share equal to the price paid by the Holder for such Restricted Stock or such other amount as may be specified in the applicable Award Agreement.

7.5 Certificates for Restricted Stock. Restricted Stock granted pursuant to the Plan may be evidenced in such manner as the Administrator shall determine. Certificates or book entries evidencing shares of Restricted Stock shall include an appropriate legend referring to the terms, conditions, and restrictions applicable to such Restricted Stock. The Company, in its discretion, may (a) retain physical possession of any stock certificate evidencing shares of Restricted Stock until the restrictions thereon shall have lapsed and/or (b) require that the stock certificates evidencing shares of Restricted Stock be held in custody by a designated escrow agent (which may but need not be the Company) until the restrictions thereon shall have lapsed and that the Holder deliver a stock power, endorsed in blank, relating to such Restricted Stock.

7.6 Section 83(b) Election. If a Holder makes an election under Section 83(b) of the Code to be taxed with respect to the Restricted Stock as of the date of transfer of the Restricted Stock rather than as of the date or dates upon which the Holder would otherwise be taxable under Section 83(a) of the Code, the Holder shall be required to deliver a copy of such election to the Company promptly after filing such election with the Internal Revenue Service.

## ARTICLE 8.

## RESTRICTED STOCK UNITS

8.1 Grant of Restricted Stock Units. The Administrator is authorized to grant Awards of Restricted Stock Units to any Eligible Individual selected by the Administrator in such amounts and subject to such terms and conditions as determined by the Administrator.

8.2 Purchase Price. The Administrator shall specify the purchase price, if any, to be paid by the Holder to the Company with respect to any Restricted Stock Unit award; provided, however, that value of the consideration shall not be less than the par value of a Share, unless otherwise permitted by Applicable Law.

8.3 Vesting of Restricted Stock Units. At the time of grant, the Administrator shall specify the date or dates on which the Restricted Stock Units shall become fully vested and nonforfeitable, and may specify such conditions to vesting as it deems appropriate, including, without limitation, vesting based upon the Holder's duration of service to the Company or any Subsidiary, Company performance, individual performance or other specific criteria, in each case on a specified date or dates or over any period or periods, as determined by the Administrator.

8.4 Maturity and Payment. At the time of grant, the Administrator shall specify the maturity date applicable to each grant of Restricted Stock Units, which shall be no earlier than the vesting date or dates of the Award and may be determined at the election of the Holder (if permitted by the applicable Award Agreement); provided that, except as otherwise set forth in an applicable Award Agreement, the maturity date relating to each Restricted Stock Unit shall not occur following the later of (a) the 15 th day of the third month following the end of the calendar year in which the applicable portion of the Restricted Stock Unit vests; or (b) the 15th day of the third month following the end of the Company's fiscal year in which the applicable portion of the Restricted Stock Unit vests. On the maturity date, the Company shall, subject to Section 11.4, transfer to the Holder one unrestricted, fully transferable Share for each Restricted Stock Unit scheduled to be paid out on such date and not previously forfeited, or in the discretion of the Administrator, an amount in cash equal to the Fair Market Value of such Shares on the maturity date or a combination of cash and Common Stock as determined by the Administrator.

8.5 No Rights as a Stockholder. Unless otherwise determined by the Administrator, a Holder of Restricted Stock Units shall possess no incidents of ownership with respect to the Shares represented by such Restricted Stock Units, unless and until such Shares are transferred to the Holder pursuant to the terms of this Plan and the Award Agreement.

## ARTICLE 9.

## PERFORMANCE AWARDS, DIVIDEND EQUIVALENTS, STOCK PAYMENTS

9.1 Performance Awards. The Administrator is authorized to grant Performance Awards, including Awards of Performance Stock Units and other Awards determined in the Administrator's discretion from time to time, to any Eligible Individual. The value of Performance Awards, including Performance Stock Units, may be linked to the attainment of the Performance Goals or other specific criteria, whether or not objective, determined by the

Administrator, in each case on a specified date or dates or over any period or periods and in such amounts as may be determined by the Administrator.

9.2 Dividend Equivalents.

(a) Dividend Equivalents may be granted by the Administrator based on dividends declared on the Common Stock, to be credited as of dividend payment dates with respect to dividends with record dates that occur during the period between the date an Award is granted to a Holder and the date such Award vests, is exercised, is distributed or expires, as determined by the Administrator. Such Dividend Equivalents shall be converted to cash or additional Shares by such formula and at such time and subject to such restrictions and limitations as may be determined by the Administrator.

9.3 Stock Payments. The Administrator is authorized to make Stock Payments to any Eligible Individual. The number or value of Shares of any Stock Payment shall be determined by the Administrator and may be based upon one or more Performance Goals or any other specific criteria, including service to the Company or any Subsidiary, determined by the Administrator. Shares underlying a Stock Payment which is subject to a vesting schedule or other conditions or criteria set by the Administrator shall not be issued until those conditions have been satisfied. Unless otherwise provided by the Administrator, a Holder of a Stock Payment shall have no rights as a Company stockholder with respect to such Stock Payment until such time as the Stock Payment has vested and the Shares underlying the Award have been issued to the Holder. Stock Payments may, but are not required to, be made in lieu of base salary, bonus, fees or other cash compensation otherwise payable to such Eligible Individual.

9.4 Purchase Price. The Administrator may establish the purchase price of a Performance Award or Shares distributed as a Stock Payment award; provided, however, that value of the consideration shall not be less than the par value of a Share, unless otherwise permitted by Applicable Law.

## ARTICLE 10.

## STOCK APPRECIATION RIGHTS

10.1 Grant of Stock Appreciation Rights.

(a) The Administrator is authorized to grant Stock Appreciation Rights to Eligible Individuals from time to time, in its discretion, on such terms and conditions as it may determine, which shall not be inconsistent with the Plan.

(b) A Stock Appreciation Right shall entitle the Holder (or other person entitled to exercise the Stock Appreciation Right pursuant to the Plan) to exercise all or a specified portion of the Stock Appreciation Right (to the extent then exercisable pursuant to its terms) and to receive from the Company an amount determined by multiplying the difference obtained by subtracting the exercise price per share of the Stock Appreciation Right from the Fair Market Value on the date of exercise of the Stock Appreciation Right by the number of Shares with respect to which the Stock Appreciation Right shall have been exercised, subject to any limitations the Administrator may impose. Unless otherwise determined by the Administrator, the exercise price

per Share subject to each Stock Appreciation Right shall be set by the Administrator, but shall not be less than 100% of the Fair Market Value on the date the Stock Appreciation Right is granted.

10.2 Stock Appreciation Right Vesting.

(a) The period during which the right to exercise, in whole or in part, a Stock Appreciation Right vests in the Holder shall be set by the Administrator, and the Administrator may determine that a Stock Appreciation Right may not be exercised in whole or in part for a specified period after it is granted. Such vesting may be based on service with the Company or any Subsidiary, Performance Criteria, Performance Goals or any other criteria selected by the Administrator. At any time after grant of a Stock Appreciation Right, the Administrator, in its discretion and subject to whatever terms and conditions it selects, may accelerate the period during which a Stock Appreciation Right vests.

(b) No portion of a Stock Appreciation Right which is unexercisable at a Holder's Termination of Service shall thereafter become exercisable, except as may be otherwise provided by the Administrator in an Award Agreement or by action of the Administrator following the grant of the Stock Appreciation Right. Unless otherwise determined by the Administrator in the Award Agreement or by action of the Administrator following the grant of the Stock Appreciation Right, the portion of a Stock Appreciation Right which is unexercisable at a Holder's Termination of Service shall automatically expire thirty (30) days following such Termination of Service.

10.3 Manner of Exercise. All or a portion of an exercisable Stock Appreciation Right shall be deemed exercised upon delivery of all of the following to the Secretary of the Company, the stock administrator of the Company, or such other person or entity designated by the Administrator, or his, her or its office, as applicable:

(a) A written or electronic notice complying with the applicable rules established by the Administrator stating that the Stock Appreciation Right, or a portion thereof, is exercised. The notice shall be signed by the Holder or other person then entitled to exercise the Stock Appreciation Right or such portion of the Stock Appreciation Right.

(b) Such representations and documents as the Administrator, in its discretion, deems necessary or advisable to effect compliance with Applicable Law. The Administrator, in its discretion, may also take whatever additional actions it deems appropriate to effect such compliance, including, without limitation, placing legends on share certificates and issuing stop-transfer notices to agents and registrars.

(c) In the event that the Stock Appreciation Right shall be exercised by any person or persons other than the Holder, appropriate proof of the right of such person or persons to exercise the Stock Appreciation Right, as determined in the discretion of the Administrator.

(d) Full payment of the exercise price and applicable withholding taxes for the Shares with respect to which the Stock Appreciation Right, or portion thereof, is exercised, in a manner permitted by Section 11.1 and Section 11.2.

10.4 Stock Appreciation Right Term. The term of each Stock Appreciation Right (the "Stock Appreciation Right Term") shall be set by the Administrator in its discretion; provided, however, that the Stock Appreciation Right Term shall not be more than ten (10) years from the date the Stock Appreciation Right is granted. The Administrator shall determine the time period, including the time period following a Termination of Service, during which the Holder has the right to exercise the vested Stock Appreciation Rights, which time period may not extend beyond the last day of the Stock Appreciation Right Term applicable to such Stock Appreciation Right. Except as limited by the requirements of Section 409A of the Code or the first sentence of this Section 10.4, the Administrator may extend the Stock Appreciation Right Term of any outstanding Stock Appreciation Right, and may extend the time period during which vested Stock Appreciation Rights may be exercised, in connection with any Termination of Service of the Holder, and may amend, subject to Section 14.1, any other term or condition of such Stock Appreciation Right relating to such a Termination of Service.

10.5 Payment. Payment of the amounts payable with respect to Stock Appreciation Rights pursuant to this Article 10 shall be in cash, Shares (based on Fair Market Value as of the date the Stock Appreciation Right is exercised), or a combination of both, as determined by the Administrator.

10.6 Expiration of Stock Appreciation Right Term: Automatic Exercise of In-The-Money Stock Appreciation Rights. Unless otherwise determined by the Administrator (in an Award Agreement or otherwise) or as otherwise directed by a Stock Appreciation Right Holder in writing to the Company, each Stock Appreciation Right outstanding on the Automatic Exercise Date with an exercise price per share that is less than the Fair Market Value per share of Common Stock as of such date shall automatically and without further action by the Stock Appreciation Right Holder or the Company be exercised on the Automatic Exercise Date. In the discretion of the Administrator, the Company or any Subsidiary shall deduct or withhold an amount sufficient to satisfy all taxes associated with such exercise in accordance with Section 11.2. Unless otherwise determined by the Administrator, this Section 10.6 shall not apply to a Stock Appreciation Right if the Holder of such Stock Appreciation Right incurs a Termination of Service on or before the Automatic Exercise Date. For the avoidance of doubt, no Stock Appreciation Right with an exercise price per share that is equal to or greater than the Fair Market Value per share of Common Stock on the Automatic Exercise Date shall be exercised pursuant to this Section 10.6.

## ARTICLE 11.

## ADDITIONAL TERMS OF AWARDS

11.1 Payment. The Administrator shall determine the methods by which payments by any Holder with respect to any Awards granted under the Plan shall be made, including, without limitation: (a) cash or check, (b) Shares (including, in the case of payment of the exercise price of an Award, Shares issuable pursuant to the exercise of the Award) held for such period of time as may be required by the Administrator in order to avoid adverse accounting consequences, in each case, having a Fair Market Value on the date of delivery equal to the aggregate payments required, (c) delivery of a written or electronic notice that the Holder has placed a market sell order with a broker acceptable to the Company with respect to Shares then issuable upon exercise or vesting of an Award, and that the broker has been directed to pay a sufficient portion of the net proceeds of

the sale to the Company in satisfaction of the aggregate payments required; provided that payment of such proceeds is then made to the Company upon settlement of such sale, or (d) any other form of legal consideration acceptable to the Administrator in its discretion. The Administrator shall also determine the methods by which Shares shall be delivered or deemed to be delivered to Holders. Notwithstanding any other provision of the Plan to the contrary, no Holder who is a Director or an "executive officer" of the Company within the meaning of Section 13(k) of the Exchange Act shall be permitted to make payment with respect to any Awards granted under the Plan, or continue any extension of credit with respect to such payment, with a loan from the Company or a loan arranged by the Company in violation of Section 13(k) of the Exchange Act.

11.2 Tax Withholding. The Company or any Subsidiary shall have the authority and the right to deduct or withhold, or require a Holder to remit to the Company, an amount sufficient to satisfy federal, state, local and foreign taxes (including the Holder's FICA, employment tax or other social security contribution obligation) required by law to be withheld with respect to any taxable event concerning a Holder arising as a result of the Plan. The Administrator, in its discretion and in satisfaction of the foregoing requirement, may withhold, or allow a Holder to elect to have the Company withhold, Shares otherwise issuable under an Award (or allow the surrender of Shares). Unless otherwise determined by the Administrator, the number of Shares which may be so withheld or surrendered shall be limited to the number of Shares which have a Fair Market Value on the date of withholding or repurchase equal to the aggregate amount of such liabilities based on the minimum statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes that are applicable to such supplemental taxable income. The Administrator shall determine the fair market value of the Shares, consistent with applicable provisions of the Code, for tax withholding obligations due in connection with a broker-assisted cashless Option or Stock Appreciation Right exercise involving the sale of Shares to pay the Option or Stock Appreciation Right exercise price or any tax withholding obligation.

11.3 Transferability of Awards.

(a) Except as otherwise provided in Section 11.3(b):

(i) No Award under the Plan may be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution or, subject to the consent of the Administrator, pursuant to a DRO, unless and until such Award has been exercised, or the Shares underlying such Award have been issued, and all restrictions applicable to such Shares have lapsed;

(ii) No Award or interest or right therein shall be liable for the debts, contracts or engagements of the Holder or the Holder's successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, hypothecation, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by Section 11.3(a)(i); and

(iii) During the lifetime of the Holder, only the Holder may exercise an Award (or any portion thereof) granted to such Holder under the Plan, unless it has been disposed

of pursuant to a DRO; after the death of the Holder, any exercisable portion of an Award may, prior to the time when such portion becomes unexercisable under the Plan or the Award Agreement, be exercised by the Holder's personal representative or by any person empowered to do so under the deceased Holder's will or under the then-applicable laws of descent and distribution.

(b) Notwithstanding Section 11.3(a), the Administrator, in its discretion, may determine to permit a Holder to transfer an Award other than an Incentive Stock Option to any one or more Permitted Transferees, subject to the following terms and conditions: (i) an Award transferred to a Permitted Transferee shall not be assignable or transferable by the Permitted Transferee other than by will or the laws of descent and distribution; (ii) an Award transferred to a Permitted Transferee shall continue to be subject to all the terms and conditions of the Award as applicable to the original Holder (other than the ability to further transfer the Award); and (iii) the Holder and the Permitted Transferee shall execute any and all documents requested by the Administrator, including, without limitation documents to (A) confirm the status of the transferee as a Permitted Transferee, (B) satisfy any requirements for an exemption for the transfer under Applicable Law and (C) evidence the transfer.

(c) Notwithstanding Section 11.3(a), a Holder may, in the manner determined by the Administrator, designate a beneficiary to exercise the rights of the Holder and to receive any distribution with respect to any Award upon the Holder's death. A beneficiary, legal guardian, legal representative, or other person claiming any rights pursuant to the Plan is subject to all terms and conditions of the Plan and any Award Agreement applicable to the Holder, except to the extent the Plan and Award Agreement otherwise provide, and to any additional restrictions deemed necessary or appropriate by the Administrator. If the Holder is married or a domestic partner in a domestic partnership qualified under Applicable Law and resides in a community property state, a designation of a person other than the Holder's spouse or domestic partner, as applicable, as the Holder's beneficiary with respect to more than 50% of the Holder's interest in the Award shall not be effective without the prior written or electronic consent of the Holder's spouse or domestic partner. If no beneficiary has been designated or survives the Holder, payment shall be made to the person entitled thereto pursuant to the Holder's will or the laws of descent and distribution. Subject to the foregoing, a beneficiary designation may be changed or revoked by a Holder at any time; provided that the change or revocation is filed with the Administrator prior to the Holder's death.

11.4 Conditions to Issuance of Shares.

(a) Notwithstanding anything herein to the contrary, the Company shall not be required to issue or deliver any certificates or make any book entries evidencing Shares issuable pursuant to any Award, unless and until the Board or the Committee has determined, with advice of counsel, that the issuance of such Shares is in compliance with Applicable Law and the Shares are covered by an effective registration statement or applicable exemption from registration. In addition to the terms and conditions provided herein, the Board or the Committee may require that a Holder make such reasonable covenants, agreements and representations as the Board or the Committee, in its discretion, deems advisable in order to comply with Applicable Law.

(b) All Share certificates delivered pursuant to the Plan and all Shares issued pursuant to book entry procedures are subject to any stop-transfer orders and other restrictions as the Administrator deems necessary or advisable to comply with Applicable Law. The Administrator may place legends on any Share certificate or book entry to reference restrictions applicable to the Shares.

(c) The Administrator shall have the right to require any Holder to comply with any timing or other restrictions with respect to the settlement, distribution or exercise of any Award, including a window-period limitation, as may be imposed in the discretion of the Administrator.

(d) No fractional Shares shall be issued and the Administrator, in its discretion, shall determine whether cash shall be given in lieu of fractional Shares or whether such fractional Shares shall be eliminated by rounding down.

(e) Notwithstanding any other provision of the Plan, unless otherwise determined by the Administrator or required by Applicable Law, the Company shall not deliver to any Holder certificates evidencing Shares issued in connection with any Award and instead such Shares shall be recorded in the books of the Company (or, as applicable, its transfer agent or stock plan administrator).

11.5 Forfeiture and Claw-Back Provisions. Pursuant to its general authority to determine the terms and conditions applicable to Awards under the Plan, the Administrator shall have the right to provide, in an Award Agreement or otherwise, or to require a Holder to agree by separate written or electronic instrument, that:

(a) (i) Any proceeds, gains or other economic benefit actually or constructively received by the Holder upon any receipt or exercise of the Award, or upon the receipt or resale of any Shares underlying the Award, shall be paid to the Company, and (ii) the Award shall terminate and any unexercised portion of the Award (whether or not vested) shall be forfeited, if (x) a Termination of Service occurs prior to a specified date, or within a specified time period following receipt or exercise of the Award, or (y) the Holder at any time, or during a specified time period, engages in any activity in competition with the Company, or which is inimical, contrary or harmful to the interests of the Company, as further defined by the Administrator or (z) the Holder incurs a Termination of Service for "cause" (as such term is defined in the discretion of the Administrator, or as set forth in a written agreement relating to such Award between the Company and the Holder); and

(b) All Awards (including any proceeds, gains or other economic benefit actually or constructively received by the Holder upon any receipt or exercise of any Award or upon the receipt or resale of any Shares underlying the Award) shall be subject to the provisions of any claw-back policy implemented by the Company, including, without limitation, any claw-back policy adopted to comply with the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules or regulations promulgated thereunder, to the extent set forth in such claw-back policy and/or in the applicable Award Agreement.

11.6 Repricing. Subject to Section 13.2, the Administrator shall have the authority, without the approval of the stockholders of the Company, to amend any outstanding Option or Stock Appreciation Right to reduce its price per share or cancel any Option or Stock Appreciation Right in exchange for cash or another Award when the Option or Stock Appreciation Right price per share exceeds the Fair Market Value of the underlying Shares.

## ARTICLE 12.

## ADMINISTRATION

12.1 Administrator. The Committee (or another committee or a subcommittee of the Board assuming the functions of the Committee under the Plan) shall administer the Plan (except as otherwise permitted herein) and, unless otherwise determined by the Board, shall consist solely of two or more Non-Employee Directors, each of whom is intended to qualify as both a "non-employee director" as defined by Rule 16b-3 of the Exchange Act or any successor rule, an "outside director" for purposes of Section 162(m) of the Code and an "independent director" under the rules of any securities exchange or automated quotation system on which the Shares are listed, quoted or traded. Notwithstanding the foregoing, any action taken by the Committee shall be valid and effective, whether or not members of the Committee at the time of such action are later determined not to have satisfied the requirements for membership set forth in this Section 12.1 or otherwise provided in any charter of the Committee. Except as may otherwise be provided in any charter of the Committee, appointment of Committee members shall be effective upon acceptance of appointment. Committee members may resign at any time by delivering written or electronic notice to the Board. Vacancies in the Committee may only be filled by the Board. Notwithstanding the foregoing, (a) the full Board, acting by a majority of its members in office, shall conduct the general administration of the Plan with respect to Awards granted to Non-Employee Directors and, with respect to such Awards, the terms "Administrator" and "Committee" as used in the Plan shall be deemed to refer to the Board and (b) the Board or Committee may delegate its authority hereunder to the extent permitted by Section 12.6.

12.2 Duties and Powers of Committee . It shall be the duty of the Committee to conduct the general administration of the Plan in accordance with its provisions. The Committee shall have the power to interpret the Plan and Award Agreements, and to adopt such rules for the administration, interpretation and application of the Plan as are not inconsistent therewith, to interpret, amend or revoke any such rules and to amend any Award Agreement; provided that the rights or obligations of the Holder of the Award that is the subject of any such Award Agreement are not affected adversely by such amendment, unless the consent of the Holder is obtained or such amendment is otherwise permitted under Section 11.5 or Section 13.10. Any such grant or award under the Plan need not be the same with respect to each Holder. Any such interpretations and rules with respect to Incentive Stock Options shall be consistent with the provisions of Section 422 of the Code. In its discretion, the Board may at any time and from time to time exercise any and all rights and duties of the Committee under the Plan except with respect to matters which under Rule 16b-3 under the Exchange Act or any successor rule, or any regulations or rules issued thereunder, or the rules of any securities exchange or automated quotation system on which the Shares are listed, quoted or traded are required to be determined in the discretion of the Committee.

12.3 Action by the Committee. Unless otherwise established by the Board or in any charter of the Committee, a majority of the Committee shall constitute a quorum and the acts of a majority of the members present at any meeting at which a quorum is present, and acts approved in writing by all members of the Committee in lieu of a meeting, shall be deemed the acts of the Committee. Each member of the Committee is entitled to, in good faith, rely or act upon any report or other information furnished to that member by any officer or other employee of the Company or any Subsidiary, the Company's independent certified public accountants, or any executive compensation consultant or other professional retained by the Company to assist in the administration of the Plan.

12.4 Authority of Administrator. Subject to the Company's Bylaws, the Committee's Charter and any specific designation in the Plan, the Administrator has the exclusive power, authority and sole discretion to:

(a) Designate Eligible Individuals to receive Awards;

(b) Determine the type or types of Awards to be granted to Eligible Individuals;

(c) Determine the number of Awards to be granted and the number of Shares to which an Award will relate;

(d) Determine the terms and conditions of any Award granted pursuant to the Plan, including, but not limited to, the exercise price, grant price, purchase price, any Performance Goals or Performance Criteria, any reload provision, any restrictions or limitations on the Award, any schedule for vesting, lapse of forfeiture restrictions or restrictions on the exercisability of an Award, and accelerations or waivers thereof, and any provisions related to non-competition and recapture of gain on an Award, based in each case on such considerations as the Administrator in its sole discretion determines;

(e) Determine whether, to what extent, and pursuant to what circumstances an Award may be settled in, or the exercise price of an Award may be paid in cash, Shares, other Awards, or other property, or an Award may be canceled, forfeited, or surrendered;

(f) Prescribe the form of each Award Agreement, which need not be identical for each Holder;

(g) Decide all other matters that must be determined in connection with an Award;

(h) Establish, adopt or revise any rules and regulations as it may deem necessary or advisable to administer the Plan;

(i) Interpret the terms of, and any matter arising pursuant to, the Plan or any Award Agreement;

(j) Make all other decisions and determinations that may be required pursuant to the Plan or as the Administrator deems necessary or advisable to administer the Plan; and

(k) Accelerate wholly or partially the vesting or lapse of restrictions of any Award or portion thereof at any time after the grant of an Award, subject to whatever terms and conditions it selects.

12.5 Decisions Binding. The Administrator's interpretation of the Plan, any Awards granted pursuant to the Plan, and any Award Agreement and all decisions and determinations by the Administrator with respect to the Plan are final, binding and conclusive on all parties.

12.6 Delegation of Authority. To the extent permitted by Applicable Law, the Board or Committee may from time to time delegate to a committee of one or more members of the Board or one or more officers of the Company the authority to grant or amend Awards or to take other administrative actions pursuant to this Article 12; provided, however, that in no event shall an officer of the Company be delegated the authority to grant awards to, or amend awards held by, the following individuals: (a) individuals who are subject to Section 16 of the Exchange Act, (b) Covered Employees with respect to Awards intended to constitute Performance-Based Compensation, or (c) officers of the Company (or Directors) to whom authority to grant or amend Awards has been delegated hereunder; provided, further, that any delegation of administrative authority shall only be permitted to the extent it is permissible under Applicable Law. Any delegation hereunder shall be subject to the restrictions and limits that the Board or Committee specifies at the time of such delegation, and the Board may at any time rescind the authority so delegated or appoint a new delegatee. At all times, the delegatee appointed under this Section 12.6 shall serve in such capacity at the pleasure of the Board and the Committee.

## ARTICLE 13.

## MISCELLANEOUS PROVISIONS

13.1 Amendment, Suspension or Termination of the Plan. Except as otherwise provided in this Section 13.1, the Plan may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Board or the Committee. However, without approval of the Company's stockholders given within twelve (12) months before or after the action by the Administrator, no action of the Administrator may, except as provided in Section 13.2, increase the limits imposed in Section 3.1 on the maximum number of Shares which may be issued under the Plan. Except as provided in Section 13.10, no amendment, suspension or termination of the Plan shall, without the consent of the Holder, impair any rights or obligations under any Award theretofore granted or awarded, unless the Award itself otherwise expressly so provides. No Awards may be granted or awarded during any period of suspension or after termination of the Plan, and in no event may any Award be granted under the Plan after April 28, 2026 (the "Expiration Date"). Any Awards that are outstanding on the Expiration Date shall remain in force according to the terms of the Plan and the applicable Award Agreement.

13.2 Changes in Common Stock or Assets of the Company, Acquisition or Liquidation of the Company and Other Corporate Events.

(a) In connection with the occurrence of any Equity Restructuring, and notwithstanding anything to the contrary in this Section 13.2, the Administrator shall equitably adjust each outstanding Award, which adjustments may include adjustments to the number and

type of securities subject to each outstanding Award and/or the exercise price or grant price thereof, if applicable, the grant of new Awards, and/or the making of a cash payment, as the Administrator deems appropriate to reflect such Equity Restructuring. The adjustments provided under this Section 13.2(a) shall be nondiscretionary and shall be final and binding on the affected Holder and the Company; provided that whether an adjustment is equitable shall be determined in the discretion of the Administrator.

(b) In the event that the Administrator determines that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), Change in Control, reorganization, merger, amalgamation, consolidation, combination, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale or exchange of Common Stock or other securities of the Company, issuance of warrants or other rights to purchase Common Stock or other securities of the Company, or other similar corporate transaction or event, as determined by the Administrator, affects the Common Stock such that an adjustment is determined by the Administrator to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended by the Company to be made available under the Plan or with respect to any Award, the Administrator may make equitable adjustments, if any, to reflect such change with respect to: (i) the aggregate number and kind of shares that may be issued under the Plan (including, but not limited to, adjustments of the limitations in Sections 3.1, 3.3 and 3.3 on the maximum number and kind of shares which may be issued under the Plan); (ii) the number and kind of Shares (or other securities or property) subject to outstanding Awards; (iii) the number and kind of Shares (or other securities or property) for which automatic grants are subsequently to be made to new and continuing Non-Employee Directors pursuant to Section 4.5; (iv) the terms and conditions of any outstanding Awards (including, without limitation, any applicable performance targets or criteria with respect thereto); and (v) the grant or exercise price per share for any outstanding Awards under the Plan. Any adjustment affecting an Award intended as Performance-Based Compensation shall be made consistent with the requirements of Section 162(m) of the Code unless otherwise determined by the Administrator.

(c) In the event of any transaction or event described in Section 13.2(b) or any unusual or nonrecurring transactions or events affecting the Company, any Subsidiary of the Company, or the financial statements of the Company or any Subsidiary, or of changes in Applicable Law or accounting principles, the Administrator, in its discretion, and on such terms and conditions as it deems appropriate, either by the terms of the Award or by action taken prior to the occurrence of such transaction or event and either automatically or upon the Holder's request, is hereby authorized to take any one or more of the following actions whenever the Administrator determines that such action is appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to any Award under the Plan, to facilitate such transactions or events or to give effect to such changes in laws, regulations or principles:

(i) To provide for either (A) termination of any such Award in exchange for an amount of cash, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Holder's rights (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction or event described in this Section 13.2 the Administrator determines in good faith that no amount would have been attained upon the exercise

of such Award or realization of the Holder's rights, then such Award may be terminated by the Company without payment) or (B) the replacement of such Award with other rights or property selected by the Administrator , in its discretion, having an aggregate value not exceeding the amount that could have been attained upon the exercise of such Award or realization of the Holder's rights had such Award been currently exercisable or payable or fully vested;

(ii) To provide that such Award be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for by similar options, rights or awards covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and prices;

(iii) To make adjustments in the number and type of shares of the Company's stock (or other securities or property) subject to outstanding Awards, and in the number and kind of outstanding Restricted Stock and/or in the terms and conditions of (including the grant or exercise price), and the criteria included in, outstanding Awards and Awards which may be granted in the future;

(iv) To provide that such Award shall be exercisable or payable or fully vested with respect to all shares covered thereby, notwithstanding anything to the contrary in the Plan or the applicable Award Agreement; and

(v) To provide that the Award will terminate and cannot vest, be exercised or become payable after such event.

(d) The Administrator, in its discretion, may include such further provisions and limitations in any Award, agreement or certificate, as it may deem equitable and in the best interests of the Company that are not inconsistent with the provisions of the Plan.

(e) Unless otherwise determined by the Administrator, no adjustment or action described in this Section 13.2 or in any other provision of the Plan shall be authorized to the extent that such adjustment would (i) with respect to Awards granted to Covered Employees and intended to qualify as Performance-Based Compensation, cause such Award to fail to so qualify or (ii) cause the Plan to violate Section 422(b)(1) of the Code. Furthermore, no such adjustment or action shall be authorized to the extent such adjustment or action would result in short-swing profits liability under Section 16 of the Exchange Act or violate the exemptive conditions of Rule 16b-3 of the Exchange Act unless the Administrator determines that the Award is not to comply with such exemptive conditions.

(f) The existence of the Plan, the Award Agreement and the Awards granted hereunder shall not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, warrants or rights to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

(g) No action shall be taken under this Section 13.2 which shall cause an Award to fail to comply with Section 409A of the Code, to the extent applicable.

(h) In the event of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the Shares or the share price of the Common Stock including any Equity Restructuring, for reasons of administrative convenience, the Company, in its discretion, may refuse to permit the exercise of any Award during a period of up to thirty (30) days prior to the consummation of any such transaction.

13.3 Approval of Plan by Stockholders. This amended and restated Plan shall be submitted for the approval of the Company's stockholders within twelve (12) months after the date of the Board's initial adoption hereof. Notwithstanding the foregoing, the Original Plan shall remain in effect on its existing terms unless and until this amended and restated Plan is approved by the Company's stockholders.

13.4 No Stockholders Rights. Except as otherwise provided herein, a Holder shall have none of the rights of a stockholder with respect to Shares covered by any Award until the Holder becomes the record owner of such Shares.

13.5 Paperless Administration. In the event that the Company establishes, for itself or using the services of a third party, an automated system for the documentation, granting or exercise of Awards, such as a system using an internet website or interactive voice response, then the paperless documentation, granting or exercise of Awards by a Holder may be permitted through the use of such an automated system.

13.6 Effect of Plan upon Other Compensation Plans. The adoption of the Plan shall not affect any other compensation or incentive plans in effect for the Company or any Subsidiary. Nothing in the Plan shall be construed to limit the right of the Company or any Subsidiary: (a) to establish any other forms of incentives or compensation for Employees, Directors or Consultants of the Company or any Subsidiary, or (b) except as otherwise provided in the penultimate sentence of Section 3.1(a), to grant or assume options or other rights or awards otherwise than under the Plan in connection with any proper corporate purpose including without limitation, the grant or assumption of options in connection with the acquisition by purchase, lease, merger, consolidation or otherwise, of the business, stock or assets of any corporation, partnership, limited liability company, firm or association.

13.7 Compliance with Laws. The Plan, the granting and vesting of Awards under the Plan and the issuance and delivery of Shares and the payment of money under the Plan or under Awards granted or awarded hereunder are subject to compliance with all Applicable Law (including but not limited to state, federal and foreign securities law and margin requirements), and to such approvals by any listing, regulatory or governmental authority as may, in the opinion of counsel for the Company, be necessary or advisable in connection therewith. Any securities delivered under the Plan shall be subject to such restrictions, and the person acquiring such securities shall, if requested by the Company, provide such assurances and representations to the Company as the Company may deem necessary or desirable to assure compliance with all Applicable Law. To the extent permitted by Applicable Law, the Plan and Awards granted or

awarded hereunder shall be deemed amended to the extent necessary to conform to Applicable Law.

13.8 Titles and Headings, References to Sections of the Code or Exchange Act. The titles and headings of the Sections in the Plan are for convenience of reference only and, in the event of any conflict, the text of the Plan, rather than such titles or headings, shall control. References to sections of the Code or the Exchange Act shall include any amendment or successor thereto.

13.9 Governing Law. The Plan and any agreements hereunder shall be administered, interpreted and enforced under the internal laws of the State of Delaware without regard to conflicts of laws thereof or of any other jurisdiction.

13.10 Section 409A. To the extent that the Administrator determines that any Award granted under the Plan is subject to Section 409A of the Code, the Award Agreement evidencing such Award shall incorporate the terms and conditions required by Section 409A of the Code. To the extent applicable, the Plan and any Award Agreements shall be interpreted in accordance with Section 409A of the Code, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding any provision of the Plan to the contrary, in the event that following the Effective Date the Administrator determines that any Award may be subject to Section 409A of the Code (including Department of Treasury guidance as may be issued after the Effective Date), the Administrator may adopt such amendments to the Plan and the applicable Award Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Administrator determines are necessary or appropriate to (a) exempt the Award from Section 409A of the Code and/or preserve the intended tax treatment of the benefits provided with respect to the Award, or (b) comply with the requirements of Section 409A of the Code and thereby avoid the application of any penalty taxes under such Section.

13.11 No Rights to Awards. No Eligible Individual or other person shall have any claim to be granted any Award pursuant to the Plan, and neither the Company nor the Administrator is obligated to treat Eligible Individuals, Holders or any other persons or Awards (or portions thereof) uniformly.

13.12 Unfunded Status of Awards. The Plan is intended to be an "unfunded" plan for incentive compensation. With respect to any payments not yet made to a Holder pursuant to an Award, nothing contained in the Plan or any Award Agreement shall give the Holder any rights that are greater than those of a general creditor of the Company or any Subsidiary.

13.13 Indemnification. To the extent allowable pursuant to Applicable Law, each member of the Committee or of the Board shall be indemnified and held harmless by the Company from any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by such member in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action or failure to act pursuant to the Plan and against and from any and all amounts paid by him or her in satisfaction of judgment in such action, suit, or proceeding against him or her; provided he or she gives the Company an opportunity, at its own expense, to handle and defend the same before he or she

undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled pursuant to the Company's Certificate of Incorporation or Bylaws, as a matter of law, or otherwise, or any power that the Company may have to indemnify them or hold them harmless.

13.14 Relationship to other Benefits. No payment pursuant to the Plan shall be taken into account in determining any benefits under any pension, retirement, savings, profit sharing, group insurance, welfare or other benefit plan of the Company or any Subsidiary except to the extent otherwise expressly provided in writing in such other plan or an agreement thereunder.

13.15 Expenses. The expenses of administering the Plan shall be borne by the Company and its Subsidiaries.

* * * * *

**T2 BIOSYSTEMS, INC.**
**2014 INCENTIVE AWARD PLAN**

**STOCK OPTION GRANT NOTICE**

T2 Biosystems, Inc., a Delaware corporation, (the "Company"), pursuant to its 2014 Incentive Award Plan, as amended from time to time (the "Plan"), hereby grants to the holder listed below ("Participant"), an option to purchase the number of shares of Common Stock ("Stock") set forth below (the "Option"). The Option is subject to the terms and conditions set forth in this Stock Option Grant Notice (the "Grant Notice") and the Stock Option Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, which are incorporated herein by reference. Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in the Grant Notice and the Agreement.

| | |
|---|---|
| **Participant:** | |
| **Grant Date:** | |
| **Exercise Price per Share:** | $ |
| **Total Exercise Price:** | $ |
| **Total Number of Shares Subject to the Option:** | shares |
| **Expiration Date:** | |
| **Vesting Commencement Date** | |
| **Vesting Schedule:** | [To be specified in individual agreements.] |
| **Type of Option:** | ☐ Incentive Stock Option ☐ Non-Qualified Stock Option |

By Participant's signature below, Participant agrees to be bound by the terms and conditions of the Plan, the Agreement and the Grant Notice. Participant has reviewed the Agreement, the Plan and the Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing the Grant Notice and fully understands all provisions of the Grant Notice, the Agreement and the Plan. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan, the Grant Notice or the Agreement.

| **T2 BIOSYSTEMS, INC.HOLDER:** | **PARTICIPANT** |
|---|---|
| By: | By: |
| Print Name: | Print Name: |
| Title: | |

**EXHIBIT A**
**TO STOCK OPTION GRANT NOTICE**

**STOCK OPTION AGREEMENT**

Pursuant to the Grant Notice to which this Agreement is attached, the Company has granted to Participant an Option under the Plan to purchase the number of shares of Stock set forth in the Grant Notice.

## ARTICLE 1.
## GENERAL

1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1.2 Incorporation of Terms of Plan. The Option is subject to the terms and conditions set forth in this Agreement and the Plan, which is incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

## ARTICLE 2.
## GRANT OF OPTION

2.1 Grant of Option. In consideration of Participant's past and/or continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the grant date set forth in the Grant Notice (the "Grant Date"), the Company has granted to Participant the Option to purchase any part or all of an aggregate of the number of shares of Stock set forth in the Grant Notice, upon the terms and conditions set forth in the Grant Notice, the Plan and this Agreement, subject to adjustments as provided in Section 12.2 of the Plan.

2.2 Exercise Price. The exercise price per share of the shares of Stock subject to the Option (the "Exercise Price") shall be as set forth in the Grant Notice.

2.3 Consideration to the Company. In consideration of the grant of the Option by the Company, Participant agrees to render faithful and efficient services to the Company or any Subsidiary. Nothing in the Plan, the Grant Notice or this Agreement shall confer upon Participant any right to continue in the employ or service of the Company or any Subsidiary or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Participant at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Participant.

## ARTICLE 3.
## PERIOD OF EXERCISABILITY

3.1 Commencement of Exercisability.

(a) Subject to Sections 3.2, 3.3, 5.9 and 5.14 hereof, the Option shall become vested

and exercisable in such amounts and at such times as are set forth in the Grant Notice.

(b) Unless otherwise determined by the Administrator, any portion of the Option that has not become vested and exercisable on or prior to the date of the Participant's Termination of Service shall be forfeited on the date of the Participant's Termination of Service and shall not thereafter become vested or exercisable.

3.2 Duration of Exercisability. The installments provided for in the vesting schedule set forth in the Grant Notice are cumulative. Each such installment which becomes vested and exercisable pursuant to the vesting schedule set forth in the Grant Notice shall remain vested and exercisable until it becomes unexercisable under Section 3.3 hereof. Once the Option becomes unexercisable, it shall be forfeited immediately.

3.3 Expiration of Option. The Option may not be exercised to any extent by anyone after the first to occur of the following events:

(a) The expiration date set forth in the Grant Notice;

(b) Except as the Administrator may otherwise approve, in the event of Participant's Termination of Service other than for Cause or by reason of Participant's death or disability, the expiration of three (3) months from the date of Participant's Termination of Service;

(c) Except as the Administrator may otherwise approve, the expiration of one (1) year from the date of Participant's Termination of Service by reason of Participant's death or disability; or

(d) Except as the Administrator may otherwise approve, upon Participant's Termination of Service for Cause.

As used in this Agreement, "Cause" shall mean (a) the Board's determination that Participant failed to substantially perform Participant's duties (other than any such failure resulting from Participant's disability); (b) the Board's determination that Participant failed to carry out, or comply with any lawful and reasonable directive of the Board or Participant's immediate supervisor; (c) Participant's conviction, plea of no contest, plea of nolo contendere, or imposition of unadjudicated probation for any felony, indictable offense or crime involving moral turpitude; (d) Participant's unlawful use (including being under the influence) or possession of illegal drugs on the premises of the Company or any of its Subsidiaries or while performing Participant's duties and responsibilities; or (e) Participant's commission of an act of fraud, embezzlement, misappropriation, misconduct, or breach of fiduciary duty against the Company of any of its Subsidiaries. Notwithstanding the foregoing, if Participant is a party to a written employment or consulting agreement with the Company (or its Subsidiary) in which the term "cause" is defined, then "Cause" shall be as such term is defined in the applicable written employment or consulting agreement.

3.4 Tax Withholding. Notwithstanding any other provision of this Agreement:

(a) The Company and its Subsidiaries have the authority to deduct or withhold, or require Participant to remit to the Company or the applicable Subsidiary, an amount sufficient to satisfy applicable federal, state, local and foreign taxes (including the employee portion of any FICA obligation) required by law to be withheld with respect to any taxable event arising pursuant to this Agreement. The Company and its Subsidiaries may withhold or Participant may make such payment in one or more of the forms specified below:

(i) by cash or check made payable to the Company or the Subsidiary with

respect to which the withholding obligation arises;

(ii) by the deduction of such amount from other compensation payable to Participant;

(iii) with respect to any withholding taxes arising in connection with the exercise of the Option, with the consent of the Administrator, by requesting that the Company withhold a net number of shares of Stock issuable upon the exercise of the Option having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries based on the minimum applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(iv) with respect to any withholding taxes arising in connection with the exercise of the Option, with the consent of the Administrator, by tendering to the Company shares of Stock having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries based on the minimum applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(v) with respect to any withholding taxes arising in connection with the exercise of the Option, through the delivery of a notice that Participant has placed a market sell order with a broker acceptable to the Company with respect to shares of Stock then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company or the Subsidiary with respect to which the withholding obligation arises in satisfaction of such withholding taxes; *provided* that payment of such proceeds is then made to the Company or the applicable Subsidiary at such time as may be required by the Administrator, but in any event not later than the settlement of such sale; or

(vi) in any combination of the foregoing.

(b) With respect to any withholding taxes arising in connection with the Option, in the event Participant fails to provide timely payment of all sums required pursuant to Section 3.4(a), the Company shall have the right and option, but not the obligation, to treat such failure as an election by Participant to satisfy all or any portion of Participant's required payment obligation pursuant to Section 3.4(a)(ii) or Section 3.4(a)(iii) above, or any combination of the foregoing as the Company may determine to be appropriate. The Company shall not be obligated to deliver any certificate representing shares of Stock issuable with respect to the exercise of the Option to Participant or his or her legal representative unless and until Participant or his or her legal representative shall have paid or otherwise satisfied in full the amount of all federal, state, local and foreign taxes applicable with respect to the taxable income of Participant resulting from the exercise of the Option or any other taxable event related to the Option.

(c) In the event any tax withholding obligation arising in connection with the Option will be satisfied under Section 3.4(a)(iii) above, then the Company may elect to instruct any brokerage firm determined acceptable to the Company for such purpose to sell on Participant's behalf a whole number of shares from those shares of Stock that are issuable upon exercise of the Option as the Company determines to be appropriate to generate cash proceeds sufficient to satisfy the tax withholding obligation and to remit the proceeds of such sale to the Company or the Subsidiary with respect to which the withholding obligation arises. Participant's acceptance of this Award constitutes Participant's instruction and authorization to the Company and such brokerage firm to complete the transactions described in this Section 3.4(c), including the transactions described in the previous sentence, as applicable. The Company may refuse to issue any shares of Stock to Participant until the foregoing tax withholding obligations are

satisfied.

(d) Participant is ultimately liable and responsible for all taxes owed in connection with the Option, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding obligations that arise in connection with the Option. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or exercise of the Option or the subsequent sale of Stock. The Company and the Subsidiaries do not commit and are under no obligation to structure the Option to reduce or eliminate Participant's tax liability.

## ARTICLE 4.
## EXERCISE OF OPTION

4.1 Person Eligible to Exercise. During the lifetime of Participant, only Participant may exercise the Option or any portion thereof. After the death of Participant, any exercisable portion of the Option may, prior to the time when the Option becomes unexercisable under Section 3.3 hereof, be exercised by Participant's personal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

4.2 Partial Exercise. Subject to Section 5.2, any exercisable portion of the Option or the entire Option, if then wholly exercisable, may be exercised in whole or in part at any time prior to the time when the Option or portion thereof becomes unexercisable under Section 3.3 hereof.

4.3 Manner of Exercise. The Option, or any exercisable portion thereof, may be exercised solely by delivery to the Secretary of the Company (or any third party administrator or other person or entity designated by the Company), during regular business hours, of all of the following prior to the time when the Option or such portion thereof becomes unexercisable under Section 3.3 hereof.

(a) An exercise notice in a form specified by the Administrator, stating that the Option or portion thereof is thereby exercised, such notice complying with all applicable rules established by the Administrator;

(b) The receipt by the Company of full payment for the shares of Stock with respect to which the Option or portion thereof is exercised, in such form of consideration permitted under Section 4.4 hereof that is acceptable to the Administrator;

(c) The payment of any applicable withholding tax in accordance with Section 3.4;

(d) Any other written representations or documents as may be required in the Administrator's sole discretion to effect compliance with Applicable Law; and

(e) In the event the Option or portion thereof shall be exercised pursuant to Section 4.1 hereof by any person or persons other than Participant, appropriate proof of the right of such person or persons to exercise the Option.

Notwithstanding any of the foregoing, the Administrator shall have the right to specify all conditions of the manner of exercise, which conditions may vary by country and which may be subject to change from time to time.

4.4 Method of Payment. Payment of the exercise price shall be by any of the following, or a combination thereof, at the election of Participant:

(a) Cash or check;

(b) With the consent of the Administrator, surrender of shares of Stock (including, without limitation, shares of Stock otherwise issuable upon exercise of the Option) held for such period of time as may be required by the Administrator in order to avoid adverse accounting consequences and having a Fair Market Value on the date of delivery equal to the aggregate exercise price of the Option or exercised portion thereof;

(c) Through the delivery of a notice that Participant has placed a market sell order with a broker acceptable to the Company with respect to shares of Stock then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the Option exercise price; *provided* that payment of such proceeds is then made to the Company at such time as may be required by the Administrator, but in any event not later than the settlement of such sale; or

(d) Any other form of legal consideration acceptable to the Administrator.

4.5 Conditions to Issuance of Stock. The Company shall not be required to issue or deliver any shares of Stock purchased upon the exercise of the Option or portion thereof prior to fulfillment of all of the following conditions: (A) the admission of such shares of Stock to listing on all stock exchanges on which such Stock is then listed, (B) the completion of any registration or other qualification of such shares of Stock under any state or federal law or under rulings or regulations of the Securities and Exchange Commission or other governmental regulatory body, which the Administrator shall, in its absolute discretion, deem necessary or advisable, (C) the obtaining of any approval or other clearance from any state or federal governmental agency which the Administrator shall, in its absolute discretion, determine to be necessary or advisable, (D) the receipt by the Company of full payment for such shares of Stock, which may be in one or more of the forms of consideration permitted under Section 4.4 hereof, and (E) the receipt of full payment of any applicable withholding tax in accordance with Section 3.4 by the Company or its Subsidiary with respect to which the applicable withholding obligation arises.

4.6 Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any shares of Stock purchasable upon the exercise of any part of the Option unless and until certificates representing such shares of Stock (which may be in book-entry form) will have been issued and recorded on the records of the Company or its transfer agents or registrars and delivered to Participant (including through electronic delivery to a brokerage account). No adjustment will be made for a dividend or other right for which the record date is prior to the date of such issuance, recordation and delivery, except as provided in Section 12.2 of the Plan. Except as otherwise provided herein, after such issuance, recordation and delivery, Participant will have all the rights of a stockholder of the Company with respect to such shares of Stock, including, without limitation, the right to receipt of dividends and distributions on such shares.

## ARTICLE 5.
## OTHER PROVISIONS

5.1 Administration. The Administrator shall have the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application of

the Plan, the Grant Notice and this Agreement as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator will be final and binding upon Participant, the Company and all other interested persons. To the extent allowable pursuant to Applicable Law, no member of the Committee or the Board will be personally liable for any action, determination or interpretation made with respect to the Plan, the Grant Notice or this Agreement.

5.2 Whole Shares. The Option may only be exercised for whole shares of Stock.

5.3 Option Not Transferable. Subject to Section 4.1 hereof, the Option may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the shares of Stock underlying the Option have been issued, and all restrictions applicable to such shares of Stock have lapsed. Neither the Option nor any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of Participant or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

5.4 Adjustments. The Administrator may accelerate the vesting of all or a portion of the Option in such circumstances as it, in its sole discretion, may determine. In addition, upon the occurrence of certain events relating to the Stock contemplated by Section 12.2 of the Plan (including, without limitation, an extraordinary cash dividend on such Stock), the Administrator may make such adjustments as the Administrator deems appropriate in the number of shares of Stock subject to the Option, the exercise price of the Option and the kind of securities that may be issued upon exercise of the Option. Participant acknowledges that the Option is subject to adjustment, modification and termination in certain events as provided in this Agreement and the Plan, including Section 12.2 of the Plan.

5.5 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Participant shall be addressed to Participant (or, if Participant is then deceased, to the person entitled to exercise the Option pursuant to Section 4.1) at Participant's last address reflected on the Company's records. By a notice given pursuant to this Section 5.5, either party may hereafter designate a different address for notices to be given to that party. Any notice shall be deemed duly given when sent via email (if to Participant) or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

5.6 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

5.7 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

5.8 Conformity to Securities Laws. Participant acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all Applicable Laws, including, without limitation, the provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated thereunder by the Securities and Exchange Commission and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Option is granted and may be exercised, only in such a manner as to conform to Applicable Law. To the

extent permitted by Applicable Law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to Applicable Law.

5.9 Amendment, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Administrator or the Board, *provided* that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Option in any material way without the prior written consent of Participant.

5.10 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in Section 5.3 and the Plan, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

5.11 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Participant is subject to Section 16 of the Exchange Act, the Plan, the Option, the Grant Notice and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by Applicable Law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

5.12 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon Participant any right to continue to serve as an employee or other service provider of the Company or any Subsidiary or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Participant at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Participant.

5.13 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

5.14 Section 409A. This Award is not intended to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "Section 409A"). However, notwithstanding any other provision of the Plan, the Grant Notice or this Agreement, if at any time the Administrator determines that this Award (or any portion thereof) may be subject to Section 409A, the Administrator shall have the right in its sole discretion (without any obligation to do so or to indemnify Participant or any other person for failure to do so) to adopt such amendments to the Plan, the Grant Notice or this Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Administrator determines are necessary or appropriate for this Award either to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

5.15 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

5.16 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company as to amounts payable and shall not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Participant shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Option, and rights no greater than the right to receive the Stock as a general unsecured creditor with respect to options, as and when exercised pursuant to the terms hereof.

5.17 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to Applicable Law, each of which shall be deemed an original and all of which together shall constitute one instrument.

5.18 Broker-Assisted Sales. In the event of any broker-assisted sale of shares of Stock in connection with the payment of withholding taxes as provided in Section 3.4(a)(v) or Section 3.4(c) or the payment of the exercise price as provided in Section 4.4(c): (A) any shares of Stock to be sold through a broker-assisted sale will be sold on the day the tax withholding obligation or exercise of the Option, as applicable, occurs or arises, or as soon thereafter as practicable; (B) such shares of Stock may be sold as part of a block trade with other participants in the Plan in which all participants receive an average price; (C) Participant will be responsible for all broker's fees and other costs of sale, and Participant agrees to indemnify and hold the Company harmless from any losses, costs, damages, or expenses relating to any such sale; (D) to the extent the proceeds of such sale exceed the applicable tax withholding obligation or exercise price, the Company agrees to pay such excess in cash to Participant as soon as reasonably practicable; (E) Participant acknowledges that the Company or its designee is under no obligation to arrange for such sale at any particular price, and that the proceeds of any such sale may not be sufficient to satisfy the applicable tax withholding obligation or exercise price; and (F) in the event the proceeds of such sale are insufficient to satisfy the applicable tax withholding obligation, Participant agrees to pay immediately upon demand to the Company or its Subsidiary with respect to which the withholding obligation arises, an amount sufficient to satisfy any remaining portion of the Company's or the applicable Subsidiary's withholding obligation.

5.19 Incentive Stock Options. Participant acknowledges that to the extent the aggregate Fair Market Value of shares of Stock (determined as of the time the option with respect to the shares is granted) with respect to which Incentive Stock Options, including this Option (if applicable), are exercisable for the first time by Participant during any calendar year exceeds $100,000 or if for any other reason such Incentive Stock Options do not qualify or cease to qualify for treatment as "incentive stock options" under Section 422 of the Code, such Incentive Stock Options shall be treated as Non-Qualified Stock Options. Participant further acknowledges that the rule set forth in the preceding sentence shall be applied by taking the Option and other stock options into account in the order in which they were granted, as determined under Section 422(d) of the Code and the Treasury Regulations thereunder. Participant also acknowledges that an Incentive Stock Option exercised more than three (3) months after Participant's Termination of Service, other than by reason of death or disability, will be taxed as a Non-Qualified Stock Option.

5.20 Notification of Disposition. If this Option is designated as an Incentive Stock Option, Participant shall give prompt written notice to the Company of any disposition or other transfer of any shares of Stock acquired under this Agreement if such disposition or transfer is made (a) within two (2) years from the Grant Date or (b) within one (1) year after the transfer of such shares of Stock to Participant. Such notice shall specify the date of such disposition or other transfer and the amount realized, in cash, other property, assumption of indebtedness or other consideration, by Participant in such disposition or other transfer.

* * * * *

**T2 BIOSYSTEMS, INC.**
**2014 INCENTIVE AWARD PLAN**

## RESTRICTED STOCK UNIT GRANT NOTICE

T2 Biosystems, Inc., a Delaware corporation (the "Company"), pursuant to its 2014 Incentive Award Plan, as amended from time to time (the "Plan"), hereby grants to the holder listed below ("Participant") the number of Restricted Stock Units (the "RSUs") set forth below. The RSUs are subject to the terms and conditions set forth in this Restricted Stock Unit Grant Notice (the "Grant Notice") and the Restricted Stock Unit Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, which are incorporated herein by reference. Unless otherwise defined herein, the terms defined in the Plan shall have the same defined meanings in the Grant Notice and the Agreement.

**Participant:**

**Grant Date:**

**Number of RSUs:**

**Type of Shares Issuable:** Common Stock

**Vesting Schedule:**

By Participant's signature below, Participant agrees to be bound by the terms and conditions of the Plan, the Agreement and the Grant Notice. Participant has reviewed the Agreement, the Plan and the Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing the Grant Notice and fully understands all provisions of the Grant Notice, the Agreement and the Plan. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan, the Grant Notice or the Agreement.

| **T2 BIOSYSTEMS, INC.HOLDER:** | **PARTICIPANT** |
|---|---|
| By: | By: |
| Print Name: | Print Name: |
| Title: | |

**EXHIBIT A**
**TO RESTRICTED STOCK UNIT GRANT NOTICE**

**RESTRICTED STOCK UNIT AGREEMENT**

Pursuant to the Grant Notice to which this Agreement is attached, the Company has granted to Participant the number of RSUs set forth in the Grant Notice.

## ARTICLE 1.
## GENERAL

1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1.2 Incorporation of Terms of Plan. The RSUs and the shares of Common Stock ("Stock") issued to Participant hereunder ("Shares") are subject to the terms and conditions set forth in this Agreement and the Plan, which is incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control, except as provided in Section 2.3(c), 2.4(b) or 3.13.

## ARTICLE 2.
## AWARD OF RESTRICTED STOCK UNITS AND DIVIDEND EQUIVALENTS

2.1 Award of RSUs and Dividend Equivalents.

(a) In consideration of Participant's past and/or continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the grant date set forth in the Grant Notice (the "Grant Date"), the Company has granted to Participant the number of RSUs set forth in the Grant Notice, upon the terms and conditions set forth in the Grant Notice, the Plan and this Agreement, subject to adjustment as provided in Section 12.2 of the Plan. Each RSU represents the right to receive one Share or, at the option of the Company, an amount of cash as set forth in Section 2.3(b), in either case, at the times and subject to the conditions set forth herein. However, unless and until the RSUs have vested, Participant will have no right to the payment of any Shares subject thereto. Prior to the actual delivery of any Shares, the RSUs will represent an unsecured obligation of the Company, payable only from the general assets of the Company.

(b) The Company hereby grants to Participant an Award of Dividend Equivalents with respect to each RSU granted pursuant to the Grant Notice for all ordinary cash dividends which are paid to all or substantially all holders of the outstanding shares of Stock between the Grant Date and the date when the applicable RSU is distributed or paid to Participant or is forfeited or expires. The Dividend Equivalents for each RSU shall be equal to the amount of cash which is paid as a dividend on one share of Stock. All such Dividend Equivalents shall be credited to Participant and retained by the Company (without interest) or, at the Company's option, may be deemed to be reinvested in additional RSUs as of the date of payment of any such dividend based on the Fair Market Value of a share of Stock on such date. Each Dividend Equivalent (including any additional RSU which results from the deemed reinvestment of Dividend Equivalents granted hereunder, if applicable) shall be subject to the same vesting, distribution or

payment, adjustment and other provisions which apply to the underlying RSU to which such Dividend Equivalent relates.

2.2 Vesting of RSUs and Dividend Equivalents.

(a) Subject to Participant's continued employment with or service to the Company or a Subsidiary on each applicable vesting date and subject to the terms of this Agreement, the RSUs shall vest in such amounts and at such times as are set forth in the Grant Notice. Each Dividend Equivalent (including any additional RSU which results from deemed reinvestments of Dividend Equivalents pursuant to Section 2.1(b) hereof, if applicable) shall vest whenever the underlying RSU to which such Dividend Equivalent relates vests.

(b) In the event Participant incurs a Termination of Service, except as may be otherwise provided by the Administrator or as set forth in a written agreement between Participant and the Company, Participant shall immediately forfeit any and all RSUs and Dividend Equivalents (including any additional RSU which results from deemed reinvestments of Dividend Equivalents pursuant to Section 2.1(b) hereof, if applicable) granted under this Agreement which have not vested or do not vest on or prior to the date on which such Termination of Service occurs, and Participant's rights in any such RSUs and Dividend Equivalents which are not so vested shall lapse and expire.

2.3 Distribution or Payment of RSUs.

(a) Participant's vested RSUs and Dividend Equivalents will be distributed in Shares (either in book-entry form or otherwise) or, at the option of the Company, paid in an amount of cash as set forth in Section 2.3(b), in either case, on the earliest to occur of the following dates:

(i) the date that is 14 months after the date upon which the applicable RSU or Dividend Equivalent vested under Section 2.2, provided that the Participant's "separation from service" (within the meaning of Section 409A(a)(2)(A)(i) of the Internal Revenue Code of 1986, as amended (the "Code"), and Treasury Regulation Section 1.409A-1(h)) from the Company ("Separation from Service") has not occurred prior to such date;

(ii) the date of the occurrence of a Change in Control that constitutes a "change in control event," as defined in Treasury Regulation Section 1.409A-3(i)(5), provided that the Participant's Separation from Service has not occurred prior to such date; or

(iii) in the seventh (7th) month following the date of Participant's Separation from Service.

(b) In the event that the Company elects to make payment of Participant's RSUs in cash, the amount of cash payable with respect to each RSU shall be equal to the Fair Market Value of a Share on the day immediately preceding the applicable distribution or payment date set forth in Section 2.3(a). All distributions made in Shares shall be made by the Company in the form of whole Shares, and any fractional share shall be distributed in cash in an amount equal to the value of such fractional share determined based on the Fair Market Value as of the date immediately preceding the date of such distribution.

(c) Notwithstanding any provisions of this Agreement or the Plan to the contrary, the time of distribution of the RSUs under this Agreement may not be changed except as may be permitted by the Administrator in accordance with Section 409A of the Code and the applicable Treasury Regulations promulgated thereunder.

2.4 Conditions to Issuance of Certificates.

(a) The Company shall not be required to issue or deliver any certificate or certificates for any Shares prior to the fulfillment of all of the following conditions: (A) the admission of the Shares to listing on all stock exchanges on which such Shares are then listed, (B) the completion of any registration or other qualification of the Shares under any state or federal law or under rulings or regulations of the Securities and Exchange Commission or other governmental regulatory body, which the Administrator shall, in its absolute discretion, deem necessary or advisable, and (C) the obtaining of any approval or other clearance from any state or federal governmental agency that the Administrator shall, in its absolute discretion, determine to be necessary or advisable. In the event that the Company delays a distribution or payment in settlement of RSUs because it determines that the issuance of shares of Stock in settlement of such RSUs will violate federal securities laws or any other Applicable Law, such distribution or payment shall be made at the earliest date at which the Company reasonably determines that the making of such distribution or payment will not cause such violation, as required by Treasury Regulation Section 1.409A-2(b)(7)(ii).

(b) Notwithstanding Section 2.4(a), no payment shall be delayed under this Section 2.4 if such delay would result in a violation of Section 409A of the Code.

2.5 Tax Withholding. Notwithstanding any other provision of this Agreement:

(a) The Company and its Subsidiaries have the authority to deduct or withhold, or require Participant to remit to the Company or the applicable Subsidiary, an amount sufficient to satisfy applicable federal, state, local and foreign taxes (including the employee portion of any FICA obligation) required by law to be withheld with respect to any taxable event arising pursuant to this Agreement. The Company and its Subsidiaries may withhold or Participant may make such payment in one or more of the forms specified below:

(i) by cash or check made payable to the Company or the Subsidiary with respect to which the withholding obligation arises;

(ii) by the deduction of such amount from other compensation payable to Participant;

(iii) with respect to any withholding taxes arising in connection with the distribution of the RSUs, with the consent of the Administrator, by requesting that the Company and its Subsidiaries withhold a net number of vested shares of Stock otherwise issuable pursuant to the RSUs having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries based on the minimum applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(iv) with respect to any withholding taxes arising in connection with the distribution of the RSUs, with the consent of the Administrator, by tendering to the Company vested shares of Stock having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries based on the minimum applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(v) with respect to any withholding taxes arising in connection with the distribution of the RSUs, through the delivery of a notice that Participant has placed a market sell order with a broker acceptable to the Company with respect to shares of Stock then issuable to Participant

pursuant to the RSUs, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company or the Subsidiary with respect to which the withholding obligation arises in satisfaction of such withholding taxes; *provided* that payment of such proceeds is then made to the Company or the applicable Subsidiary at such time as may be required by the Administrator, but in any event not later than the settlement of such sale; or

(vi) in any combination of the foregoing.

(b) With respect to any withholding taxes arising in connection with the RSUs, in the event Participant fails to provide timely payment of all sums required pursuant to Section 2.5(a), the Company shall have the right and option, but not the obligation, to treat such failure as an election by Participant to satisfy all or any portion of Participant's required payment obligation pursuant to Section 2.5(a)(ii) or Section 2.5(a)(iii) above, or any combination of the foregoing as the Company may determine to be appropriate. The Company shall not be obligated to deliver any certificate representing shares of Stock issuable with respect to the RSUs to Participant or his or her legal representative unless and until Participant or his or her legal representative shall have paid or otherwise satisfied in full the amount of all federal, state, local and foreign taxes applicable with respect to the taxable income of Participant resulting from the vesting or settlement of the RSUs or any other taxable event related to the RSUs.

(c) In the event any tax withholding obligation arising in connection with the RSUs will be satisfied under Section 2.5(a)(iii), then the Company may elect to instruct any brokerage firm determined acceptable to the Company for such purpose to sell on Participant's behalf a whole number of shares from those shares of Stock then issuable to Participant pursuant to the RSUs as the Company determines to be appropriate to generate cash proceeds sufficient to satisfy the tax withholding obligation and to remit the proceeds of such sale to the Company or the Subsidiary with respect to which the withholding obligation arises. Participant's acceptance of this Award constitutes Participant's instruction and authorization to the Company and such brokerage firm to complete the transactions described in this Section 2.5(c), including the transactions described in the previous sentence, as applicable. The Company may refuse to issue any shares of Stock in settlement of the RSUs to Participant until the foregoing tax withholding obligations are satisfied, *provided* that no payment shall be delayed under this Section 2.5(c) if such delay will result in a violation of Section 409A of the Code.

(d) Participant is ultimately liable and responsible for all taxes owed in connection with the RSUs, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding obligations that arise in connection with the RSUs. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or payment of the RSUs or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure the RSUs to reduce or eliminate Participant's tax liability.

2.6 Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until certificates representing such Shares (which may be in book-entry form) will have been issued and recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant (including through electronic delivery to a brokerage account). Except as otherwise provided herein, after such issuance, recordation and delivery, Participant will have all the rights of a stockholder of the Company with respect to such Shares, including, without limitation, the right to receipt of dividends and distributions on such Shares.

## ARTICLE 3.

## OTHER PROVISIONS

3.1 Administration. The Administrator shall have the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan, the Grant Notice and this Agreement as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Administrator will be final and binding upon Participant, the Company and all other interested persons. To the extent allowable pursuant to Applicable Law, no member of the Committee or the Board will be personally liable for any action, determination or interpretation made with respect to the Plan, the Grant Notice or this Agreement.

3.2 RSUs Not Transferable. The RSUs may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the Shares underlying the RSUs have been issued, and all restrictions applicable to such Shares have lapsed. No RSUs or any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of Participant or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

3.3 Adjustments. The Administrator may accelerate the vesting of all or a portion of the RSUs in such circumstances as it, in its sole discretion, may determine. Participant acknowledges that the RSUs and the Shares subject to the RSUs are subject to adjustment, modification and termination in certain events as provided in this Agreement and the Plan, including Section 12.2 of the Plan.

3.4 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Participant shall be addressed to Participant at Participant's last address reflected on the Company's records. By a notice given pursuant to this Section 3.4, either party may hereafter designate a different address for notices to be given to that party. Any notice shall be deemed duly given when sent via email or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

3.5 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

3.6 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

3.7 Conformity to Securities Laws. Participant acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all Applicable Laws, including, without limitation, the provisions of the Securities Act and the Exchange Act, and any and all regulations and rules promulgated thereunder by the Securities and Exchange Commission, and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the RSUs are granted, only in such a manner as to conform to Applicable Law. To the extent permitted by Applicable Law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform

to Applicable Law.

3.8 Amendment, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Administrator or the Board*, provided* that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the RSUs in any material way without the prior written consent of Participant.

3.9 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in Section 3.2 and the Plan, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

3.10 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Participant is subject to Section 16 of the Exchange Act, the Plan, the RSUs, the Dividend Equivalents (including RSUs which result from deemed reinvestments of Dividend Equivalents pursuant to Section 2.1(b) hereof, if applicable), the Grant Notice and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by Applicable Law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

3.11 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon Participant any right to continue to serve as an employee or other service provider of the Company or any Subsidiary or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Participant at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Participant.

3.12 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

3.13 Section 409A. The intent of the parties is that the payments and benefits under the Grant Notice and this Agreement comply with Section 409A of the Code and the Department of Treasury regulations and other interpretive guidance issued thereunder, and, accordingly, to the maximum extent permitted, the Grant Notice and this Agreement shall be interpreted to be in compliance therewith.

3.14 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

3.15 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company as to amounts payable and shall not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Participant shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the RSUs and Dividend Equivalents.

3.16 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to Applicable Law, each of which shall be deemed an original and all of which together shall constitute one instrument.

3.17 Broker-Assisted Sales. In the event of any broker-assisted sale of shares of Stock in connection with the payment of withholding taxes as provided in Section 2.5(a)(iii) or Section 2.5(a)(v): (A) any shares of Stock to be sold through a broker-assisted sale will be sold on the day the tax withholding obligation arises or as soon thereafter as practicable; (B) such shares of Stock may be sold as part of a block trade with other participants in the Plan in which all participants receive an average price; (C) Participant will be responsible for all broker's fees and other costs of sale, and Participant agrees to indemnify and hold the Company harmless from any losses, costs, damages, or expenses relating to any such sale; (D) to the extent the proceeds of such sale exceed the applicable tax withholding obligation, the Company agrees to pay such excess in cash to Participant as soon as reasonably practicable; (E) Participant acknowledges that the Company or its designee is under no obligation to arrange for such sale at any particular price, and that the proceeds of any such sale may not be sufficient to satisfy the applicable tax withholding obligation; and (F) in the event the proceeds of such sale are insufficient to satisfy the applicable tax withholding obligation, Participant agrees to pay immediately upon demand to the Company or its Subsidiary with respect to which the withholding obligation arises an amount in cash sufficient to satisfy any remaining portion of the Company's or the applicable Subsidiary's withholding obligation.

* * * * *

**Exhibit 10.21**

Confidential

# CO-DEVELOPMENT, COLLABORATION AND CO-MARKETING AGREEMENT

This **Co-Development, Collaboration and Co-Marketing Agreement** (the " ***Agreement*** ") is entered into on November 1, 2016 (the " ***Effective Date*** ") by and between **T2 Biosystems, Inc.** , a Delaware corporation (" ***T2 Bio*** "), having its principal offices at 101 Hartwell Avenue, Lexington, Massachusetts 02421, and **Allergan Sales, LLC** , a Delaware limited liability company (" ***Allergan*** "), having its principal offices at Morris Corporate Center III, 400 Interpace Parkway, Parsippany, NJ 07054. T2 Bio and Allergan are each a " ***Party*** " and together the " ***Parties*** " to this Agreement.

## RECITALS

**WHEREAS** , T2 Bio agrees to develop, in collaboration with Allergan, (1) a direct detection diagnostic test panel of [***] directly in whole blood (the " ***T2GNR Panel*** " and together with the T2Bacteria II Panel, the " ***Developed Products*** "), as further described below in this Agreement; and

**WHEREAS ,** T2 Bio desires to give Allergan the right to co-market certain T2 Bio products and Allergan desires to co-market certain T2 Bio products.

**NOW, THEREFORE** , in consideration of the mutual promises contained herein, the Parties agree as follows:

## 1. DEFINITIONS

**1.1** ***"Affiliate"*** means with respect to either Party, any person or entity controlling, controlled by, or under common control with such Party, where "control" means (a) the possession, directly or indirectly, of the power to direct the management or policies of a person or entity, whether through the ownership of voting securities, by contract, or otherwise, or (b) the ownership, directly or indirectly, of at least 50% of the voting securities or other ownership interest of a person or entity.

**1.2 "** ***Allergan Management Representative*** **"** shall mean its Chief Commercial Officer or a designee thereof and any successor thereto.

**1.3** ***"Background IP"*** of a Party means any and all technology and Intellectual Property Rights that are owned, whether solely or jointly with others, or controlled by or licensed to such Party upon the Effective Date, or that are developed by, acquired by or licensed to such Party after the Effective Date independent of this Agreement.

**1 . 4** ***"Developed Products"*** means collectively, (1) the T2Bacteria II Panel and (2) the T2GNR Panel, each developed pursuant to the Project Plan.

**1.5 "** ***Improvements*** **"** means any improvements, enhancements, modifications or derivative works, whether or not patentable.

**1.6** ***"Intellectual Property Rights"*** means (a) any rights with respect to inventions, discoveries, or improvements, including patents, patent applications, and certificates of invention; trade secrets, know-how, or similar rights, (b) any rights with respect to recognizable sign s, design s, or expression s which identify products or services of a particular source, including trademark, (c) the protection of works of authorship or expression, including copyrights and future copyright as it arises under this Agreement, and (d) similar rights under any laws or international

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conventions throughout the world, including the right to apply for registrations, certificates, or renewals with respect thereto, the rights to prosecute, enforce, and obtain damages.

**1.7 *"Jointly Developed IP"*** means the Inventions (as defined below) jointly conceived, developed, reduced to practice or otherwise created jointly by the personnel of (or Third Parties working on behalf of) both Parties under this Agreement (i.e., Inventions are Jointly Developed IP if at least one inventor from each Party is, or is required under U.S. patent law to be, identified on the applicable patent application), but in each case excluding Allergan Improvements, T2 Bio Improvements, Allergan Inventions and T2 Bio Inventions.

**1.8 " *Net Sales* "** means, with respect to any T2 Bio Co-Marketed Product, the gross amounts invoiced for sales or other dispositions of such products, less the following deductions as determined in accordance with U.S. GAAP:

(a) customary trade, cash and quantity discounts;

(b) amounts repaid or credits or allowances given or made for rejection, defect, recall or return of product or for retroactive price reductions and billing errors;

(c) price reductions, rebates and chargeback provisions granted to direct and indirect customers;

(d) if included in the aggregate gross invoice price of such product, sales or excise taxes, duties or other similar governmental charges (including any tax such as a value added or similar tax, and excluding any taxes based on, or in lieu of, income) relating to the sale of such product, as adjusted for rebates and refunds;

(e) the portion of administrative fees paid during the relevant time period to group purchasing organizations or pharmaceutical benefit managers relating to such product;

(f) any invoiced amounts that are not collected by T2 Bio or its Affiliates or licensees, including bad debts (provided that any such amounts subsequently collected shall be included in Net Sales for the period in which collected);

(g) fees or other discounts to distributors and wholesalers;

(h) one-half (1/2) of the amounts actually paid by T2 Bio for licenses to Intellectual Property Rights owned by Third Parties necessary to make, use or sell the T2 Bio Co-Marketed Product not to exceed a maximum deduction pursuant to this clause (h) of three percent (3%) of the gross sale prices of the applicable T2 Bio Co-Marketed Product; and

(i) any other similar and customary deductions (including accrued provisions) that are consistent with U.S. GAAP, consistently applied.

In no event shall any particular amount identified above be deducted more than once in calculating Net Sales. For purposes of determining Net Sales, a sale or other disposition shall not include sales, transfers or dispositions of products for research or clinical purposes or as samples.

**1.9 *"Project"*** means the development of the Developed Products to be performed in accordance with the Project Plan.

**1.10 " *T2 Bio Management Representative* "** shall mean its Chief Commercial Officer or a designee thereof and any successor thereto.

**1.11 *"T2Bacteria Panel"*** means a direct detection diagnostic test panel of bacterial sepsis, E *.coli, K, pneumonia, P. aureginosa, S. aureus, E. faecium,* and *A. baumanii* directly in whole blood.

**1.12 *"T2Candida Panel"*** means a direct detection diagnostic test panel of *C. albicans, C. tropicalis, C. parapsilosis, C. krusei and C. glabrata* directly in whole blood.

**1.13 *"T2Dx Instrument"*** means a fully-automated, benchtop diagnostics system capable of running diagnostic tests directly from whole blood utilizing T2MR Technology.

**1.14 *"T2MR Technology"*** means magnetic resonance-based diagnostic technology or any element thereof that enables the measurement of how water molecules react in the presence of magnetic fields and is capable of detecting a variety of targets.

**1.15 *"Third Party"*** means any entity other than T2 Bio or Allergan or an Affiliate of T2 Bio or Allergan.

**2. PROJECT PLAN**

**2.1 Project Plan.** The Parties shall form a Joint Research & Development Committee (the " ***JRDC*** ") promptly after the Effective Date to oversee and manage all activities under the Project Plan (the " ***Project Plan*** "), excluding any dispute that may arise under this Agreement and intellectual property matters. Each Party will use commercially reasonable efforts to perform the obligations assigned to such Party in the Project Plan. The Project Plan shall at a minimum set forth: (i) certain tasks to be performed under the Project, (ii) the Project schedule, and (iii) each Party's obligations with respect to the Project. Any changes to the Project Plan must follow the Joint Research & Development Committee process as outlined in Section 2.2(d) below. The Project Plan is, and any changes thereto shall be, attached as Exhibit A and incorporated by reference into this Agreement. No changes to the Project Plan shall become effective until executed by T2 Bio and Allergan.

**2.2 Joint Research & Development Committee.**

(a) **Joint Research & Development Committee.** The JRDC shall initially be composed of three representatives from each of T2 Bio and Allergan, including each Party's Project Lead (as defined below). The number of representatives comprising the JRDC may be changed upon mutual agreement of the Parties. The initial representatives of each Party on the JRDC will be specified in the Project Plan. Either Party may, upon written notice to the other Party, change its representatives to the JRDC.

(b) **Meetings of the JRDC.** The JRDC shall hold meetings at least once every calendar quarter, unless mutually agreed by the Parties, at such times and places as mutually determined by the Parties, including by teleconference. At least one representative from Allergan and T2 Bio shall attend each meeting. The meetings may be by telephone, video conference or other mutually accepted means. The meetings will focus on: (i) the progress made during the period since the previous JRDC meeting, including with respect to development and regulatory approval of the Developed Products, (ii) review and approval of the Project Plan for the following calendar quarter (iii) newly set objectives and performance goals, (iv) issues requiring resolution and resolutions of previously reported issues, and (v)

review of the Project Plan and review and approval of any amendments to the Project Plan proposed by either Party. Each Party is responsible for its own costs in connection with preparing for and attending the meetings.

(c) **Limitations.** The JRDC shall have no power to amend, modify or grant any waivers under this Agreement; provided, however, the JRDC may make changes to the Project Plan, which is incorporated by reference into this Agreement. Any amendment or modification of this Agreement or waiver granted hereunder must be made in accordance with Section 12.13 of this Agreement.

(d) **Decisions of the JRDC.** All decisions of the JRDC shall require a unanimous vote of each Party's representatives in attendance at the applicable meeting. In the event that any matter submitted to a vote of the representatives in attendance at a meeting does not receive unanimous approval, such matter shall be submitted to the T2 Bio Management Representative and the Allergan Management Representative promptly following the meeting. The T2 Bio Management Representative and the Allergan Management Representative shall use reasonable efforts to reach agreement on the matter; provided, however, if after thirty (30) calendar days following the original meeting date they have not reached agreement on the matter, the matter shall be decided by T2 Bio, in its sole discretion, except for changes to the Project Plan, which can only be approved in writing by consensus of the members of the JRDC.

(e) **Project Leads.** The JRDC shall appoint a principal point of contact for each Party to act as such Party's project lead (each, a " ***Project Lead*** ") and coordinate and act as a liaison with the other Party with respect to this Agreement. The Project Leads' responsibilities shall generally include overseeing and supervising its Party's fulfillment of its obligations under the Project Plan, understanding the obligations of the other Party under the Project Plan, and discussing the progress of the Project Plan and barriers to success, key issues and issues-resolution options with the other Party's Project Lead and the JRDC.

**2.3 Regulatory Approval and Commercialization.** T2 Bio shall use commercially reasonable efforts to seek regulatory approval of the Developed Products from the United States Food and Drug Administration (FDA), the European Medicines Agency (EMA) and the applicable regulatory authority in all other jurisdictions identified in the Project Plan. Upon receiving regulatory approval for a Developed Product, T2 Bio shall promptly notify Allergan in writing of such approval and use commercially reasonable efforts to commercialize such Developed Product in such jurisdictions where such approval has been obtained. In connection with seeking regulatory approval of the Developed Products and upon T2 Bio's reasonable request, Allergan shall provide T2 Bio reasonable access to data generated in Allergan-sponsored clinical trials in which a Developed Product has been used.

**3. COMPENSATION**

**3.1 Initial Payment.** Allergan shall pay T2 Bio an up-front non-refundable payment in the amount of $2,000,000 within five (5) calendar days of the Effective Date.

**3.2 Milestone Payments.** Upon the achievement of a milestone described in clause (a) or (b) of this Section 3.2, T2 Bio shall provide to Allergan written notification of and supporting documentation for the achievement of the applicable milestone. In addition, in connection with the delivery of a panel cartridge described in clause (c) or (d) of this Section 3.2, T2 Bio shall provide supporting documentation demonstrating that such panel cartridge meets the applicable specifications set forth in the Project Plan. Allergan shall make the following non-refundable payments to T2 Bio within forty-five (45) calendar days of receipt of notice of the achievement of the milestone described in clause (a) or (b) or receipt of the panel cartridges described in clauses (c) or (d); provided, however, that Allergan shall within twenty (20) calendar days of receiving such notice or panel cartridges, as applicable, and supporting

documentation from T2 Bio notify T2 Bio in writing in the event Allergan believes that such milestone has not been achieved, in which case the Parties shall discuss in good faith whether such milestone has been met and, if the Parties cannot reach agreement on such matter, the question of whether such milestone has been achieved shall be decided by a Third Party with relevant expertise selected by mutual agreement of the Parties, with the costs of such Third Party being borne by the Party against which the determination of such Third Party has been made.

(a) $500,000 upon achievement of **[***]** ;

(b) $500,000 upon achievement of **[***]** ;

(c) $500,000 upon delivery to Allergan of **[***]** in accordance with the Project Plan; and

(d) $500,000 upon delivery to Allergan of **[***]** in accordance with the Project Plan.

**3.3 Purchase of Certain T2 Bio Products for Clinical Trials**.

(a) T2 Bio agrees to sell the T2Bacteria II Panel, the T2GNR Panel and the T2Dx Instrument to Allergan or to any contract research organization or clinical trial site designated by Allergan for an Allergan–sponsored clinical trial at which a Developed Product is to be used (a " ***Designee*** ") at **[***]** % of T2 Bio's fully burdened cost (but, in any event, less than the retail list price therefor) for use by Allergan or its Designee in Allergan-sponsored clinical trials. Any such product sold to Allergan or its Designee under this Section 3.3 shall not be resold; provided, however, that Allergan may transfer or otherwise distribute any such product for use in clinical trials; provided, further, however, that Allergan shall provide commercially reasonable efforts to ensure that no Designee uses any such product outside of the applicable Allergan-sponsored clinical trial.

(b) On the first business day of the first calendar quarter in which Allergan anticipates ordering a T2Dx Instrument and on each calendar quarter thereafter in which Allergan anticipates ordering a T2Dx Instrument, Allergan shall deliver to T2 Bio in writing a rolling, nonbinding forecast detailing Allergan's anticipated requirement of T2Dx Instruments for the next three (3) calendar months. T2 Bio shall deliver, and in the case of a T2Dx Instrument install, any products purchased under this Section 3.3 to Allergan or its Designee within thirty (30) calendar days of T2 Bio's receipt of a purchase order for such products; provided, however, if ten (10) or more T2Dx Instruments are included in a purchase order delivered by Allergan or its Designee to T2 Bio, T2 Bio shall have sixty (60) calendar days from T2 Bio's receipt of such purchase order to deliver and install such T2Dx Instruments. Only one (1) purchase order will be submitted per month, and no purchase order will exceed twenty (20) T2Dx Instruments. For the avoidance of doubt, (x) in the event of any conflict between this Agreement and such purchase order, this Agreement will control, and (y) no substantive term of such purchase order not set forth in this Agreement shall be binding on the Parties. Allergan or its Designee shall pay T2 Bio on a time and materials basis for the installation, support and maintenance of any T2Dx Instrument purchased under this Section 3.3 initially at the standard rates customarily charged by T2 Bio to research customers substantially similar to Allergan and any Designee as of the Effective Date, which initial rates are subject to annual increases based on T2 Bio's then standard rates, provided that such rates may not be increased by more than 3% annually. Allergan shall pay T2 Bio for such products and services within forty-five (45) calendar days of receiving the applicable invoice from T2 Bio.

(c) T2 Bio shall assume all risk of loss, damage or destruction to any products sold to Allergan or its Designee under this Section 3.3 from initial shipment until delivery and installation of such products; provided, however, that Allergan, or its Designee, as applicable, shall reimburse T2 Bio for all shipping and freight costs related

to such shipment and delivery of such products under this Section 3.3. In the event T2 Bio delivers a T2Dx Instrument at a Designee's facility but is not permitted by the Designee to install the T2Dx Instrument at the time of delivery, Allergan will provide T2 Bio with instruction as to whether T2 Bio should (x) return the T2Dx Instrument to T2 Bio's facility for future delivery, in which case T2 Bio shall assume all risk of loss, damage or destruction to the T2Dx Instrument until its future delivery and installation, or (y) deliver the T2Dx Instrument to the Designee's facility for installation at a later date, in which case, as between the Parties, Allergan shall assume all risk of loss, damage or destruction to the T2Dx Instrument.

**3.4 Allergan Commission for Co-Marketing Sales.** T2 Bio shall pay Allergan an amount equal to (A) [***]% of the Net Sales of T2 Bio Co-Marketed Products to Joint Accounts (as defined below) and (B) [***]% of the Net Sales of T2 Bio Co-Marketed Products to Open Accounts (as defined below), (the " ***Commission*** "). Notwithstanding anything to the contrary contained herein, T2 Bio shall pay the Commission, if any, to Allergan within forty five (45) calendar days following the end of each calendar quarter.

**3.5 T2 Bio Financial Obligations.** T2 Bio shall be responsible for and shall pay all remaining development costs relating to the Developed Products, including costs related to regulatory approval and clearance of the Developed Products not otherwise made by Allergan in accordance with Sections 3.1 and 3.2 of this Agreement.

**3.6 Payments.**

(a) **Mode of Payment.** All payments are non-refundable and shall be made in U.S. Dollars, which payment shall be made by wire transfer of immediately available funds to a bank account designated in writing by the receiving Party or in such other manner as may be agreed by the Parties.

(b) **Currency Conversion.** For the purpose of calculating Net Sales expressed in currencies other than U.S. Dollars, a Party shall convert any amount expressed in a foreign currency into U.S. Dollar equivalents using its, its Affiliate's or sublicensee's standard conversion methodology consistent with U.S. GAAP.

(c) **Interest on Late Payments.** Any amount required to be paid by a Party under this Agreement which is not paid on the date due shall bear interest at an annual rate equal to two (2) percentage points above the U.S. prime interest rate, as reported by The Wall Street Journal (New York edition) for the first business day of such month. Such interest shall be accrued daily.

**3.7 Taxes.**

(a) Each Party is responsible for its own taxes, duties, levies, imposts, assessments, deductions, fees, withholdings or similar charges imposed on or measured by net income or overall gross income (including branch profits), gross receipts, capital, ability or right to do business, property, and franchise or similar taxes pursuant to applicable law.

(b) The payments pursuant to this Agreement (each, a " ***Payment*** ") shall be paid free and clear of any and all taxes, except for the deduction or withholding of any and all taxes and other similar charges required by applicable law, other than VAT (as defined below) (" ***Withholding Taxes*** "). Where Withholding Taxes are required by applicable law on any Payment, the Parties shall use their commercially reasonable efforts to do all such acts and things and to sign all such documents as will enable them to report, withhold and lawfully minimize such Withholding Taxes. Where Withholding Taxes are required by applicable law on any Payment, the payor shall pay such

Withholding Taxes to the appropriate government authority, deduct the amount paid from the amount due to payee and remit to payee the net amount due after such deduction of withholding taxes, and secure and send to payee reasonable available evidence of such payment within a reasonable period of time, and such Withholding Taxes shall be treated for all purposes of this Agreement as having been paid to the payee hereunder.

(c) All Payments are exclusive of value added tax, ad valorem, goods and services or similar tax chargeable on the supply or deemed supply of goods or services, sales and use taxes, consumption taxes and other similar taxes required by applicable law, including interest, penalties or other additions thereto (" ***VAT*** "). If any VAT is required in respect of any Payments under applicable law, the payor shall pay VAT at the applicable rate in respect of any such Payments following the receipt of a valid VAT invoice in the appropriate form issued by the payee in respect of those Payments, such VAT to be payable forty-five (45) calendar days after the receipt by the payor of the applicable valid VAT invoice relating to that VAT payment. The payor shall not be responsible for any penalties and interest resulting from the failure by the payee to collect (if not included on a valid VAT invoice) or remit any such VAT. The Parties shall reasonably cooperate to eliminate or minimize the amount of any such VAT imposed on the transactions contemplated in this agreement.

**3.8 Costs and Expenses.** Except as otherwise provided in the Project Plan or otherwise in this Agreement, neither Party shall be entitled to any payment, cost reimbursement, or other compensation from the other Party, and each Party will be responsible for its own costs and expenses incurred in rendering performance of its obligations under this Agreement.

## 4. INTELLECTUAL PROPERTY RIGHTS AND LICENSES

### 4.1 Ownership of Intellectual Property.

(a) **Background IP.** As between the Parties, each Party shall own and retain all right, title and interest in and to its Background IP.

(b) **Inventions.** For purposes of this Agreement, the term " ***Inventions*** " shall mean any works of authorship, inventions, methods, processes, materials, and other intellectual property, whether or not patentable, made by a Party in the course of performance under this Agreement. Except as otherwise set forth in clauses (c) and (d) below, each Party shall own any Inventions created by such Party's or its Affiliates' employees or contractors as determined in accordance with U.S. patent law. If any such Inventions are Jointly Developed IP, each Party shall have the right to use, license and exploit such Jointly Developed IP, subject to Section 5, without the consent of, or accounting to, the other Party.

(c) **T2 Bio Inventions.** T2 Bio shall own all right, title and interest in and to (x) all Improvements to T2 Bio's technology, instruments, primers, probes, sequences, algorithms or reagents and (y) all Inventions that primarily relate to (A) diagnostic instruments, including T2MR Technology, primers, probes, sequences, algorithms or reagents or (B) the Developed Products, in each case including all Intellectual Property Rights therein, conceived, developed, reduced to practice or otherwise created pursuant to a Project Plan or otherwise in connection with this Agreement, regardless of the inventing or creating Party (collectively, the ***"T2 Bio Inventions"*** ). Allergan hereby assigns to T2 Bio all of Allergan's right, title and interest in and to the T2 Bio Inventions.

(d) **Allergan Inventions.** Allergan shall own all right, title and interest in and to (x) all Improvements to Allergan's therapeutics or therapeutic compounds and (y) all Inventions that primarily relate to therapeutics or

therapeutic compounds, in each case including all Intellectual Property Rights therein, conceived, developed, reduced to practice or otherwise created pursuant to a Project Plan or otherwise in connection with this Agreement, regardless of the inventing or creating Party (collectively, the "***Allergan Inventions***"). T2 Bio hereby assigns to Allergan all of T2 Bio's right, title and interest in and to the Allergan Inventions.

(e) **Trademarks.** As between the Parties, each Party shall own and retain all right, title and interest in and to all trademarks and trademark applications covering such Party's products. For the avoidance of doubt, T2 Bio shall own all trademarks covering the Developed Products, and Allergan shall not apply for any trademarks covering the Developed Products. Prior to submitting any trademark application for the Developed Products, T2 Bio shall provide the proposed trademarks and/or trade names for the Developed Products to Allergan, and Allergan shall have fifteen (15) calendar days to provide comments to T2 Bio concerning such proposed trademarks and trade names.

**4.2 Licenses.**

(a) **License to Allergan.** Subject to the terms and conditions of this Agreement, T2 Bio hereby grants Allergan a **[***]** license, with right of sublicense with T2 Bio's prior consent, not to be unreasonably withheld, to use T2 Bio's Background IP, T2 Bio Inventions, and any other intellectual property developed by T2 Bio or its Affiliates under this Agreement (excluding trademarks which are addressed in Section 4.1(e) and Section 6) during the Term (as defined below) solely to the extent required for Allergan to (x) perform its obligations under this Agreement, including Section 6.3, and (y) to use the Developed Products to conduct internal research, develop, optimize and improve its anti-infective therapeutic compounds and anti-infective therapeutic products.

(b) **License to T2 Bio.** Subject to the terms and conditions of this Agreement, Allergan hereby grants T2 Bio a non-exclusive, non-transferable (except as set forth in Section 12.2), fully-paid, royalty-free license, without right of sublicense, to use Allergan's Background IP, Allergan Inventions, and any other intellectual property developed by Allergan or its Affiliates under this Agreement (excluding trademarks which are addressed in Section 4.1(e) and Section 6) during the Term solely to the extent required for T2 Bio to perform its obligations under this Agreement, including Section 6.3.

**4.3 License Restrictions.** Neither Party may use the technology or intellectual property of the other Party except as specifically authorized under this Agreement. Neither Party shall cause or permit the reverse engineering, disassembly, or decompilation of the other Party's technology, nor undertake any analysis of the design or construction of such technology (including instruments, devices, algorithms and reagents); provided the foregoing shall not apply to the extent such a restriction is expressly prohibited by applicable law. Other than the express licenses granted by this Agreement, neither Party grants any right or license to the other party, by implication, estoppel or otherwise, to any Party's Intellectual Property Rights. Allergan agrees that it shall not use any T2 Bio Inventions in connection with the development of a diagnostic instrument. T2 Bio agrees that it shall not use any Allergan Inventions in connection with the development of a therapeutic or therapeutic compounds.

**4.4 Data Ownership.** Notwithstanding anything to the contrary contained herein, any Party that conducts or sponsors a clinical trial or other activity involving the Developed Products that generates data shall own such data; provided, however, that (x) such Party hereby grants to the other Party hereto a perpetual, fully-paid, non-exclusive, worldwide license to such data for the purpose of seeking regulatory approval of the Developed Products, conducting internal research or optimizing and improving the Developed Products, and (y) in the case of data generated by T2 Bio, T2 Bio hereby grants to Allergan a perpetual, fully-paid, non-exclusive, worldwide license to such data for the purpose of developing, optimizing or improving anti-infective therapeutic compounds and anti-infective products.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**4.5 Assistance.** Each Party (each, an " ***Assisting Party*** ") agrees to execute all papers, including patent applications, invention assignments and copyright assignments, and otherwise agrees to assist the other Party (the " ***Owning Party*** ") as reasonably required at the Owning Party's reasonable expense to perfect in the Owning Party the right, title and other interest in the Inventions expressly granted to the Owning Party under this Agreement. **No Implied Rights.** Except for the licenses that are expressly granted by this Agreement, nothing in this Agreement or any course of dealing between the Parties will be deemed to create a license from either Party to the other of any Intellectual Property Right, whether by estoppel, implication, or otherwise.

**5. PROSECUTION AND ENFORCEMENT**

**5.1 Patent Prosecution for Jointly Developed IP.** Unless otherwise agreed on a case-by-case basis, T2 Bio shall have the first right, but not the obligation, using outside legal counsel reasonably acceptable to Allergan, to conduct and control prosecution (including any opposition, re-examination or similar proceedings), maintenance, challenges against validity and unenforceability or patentability with respect to any patent applications and patents resulting from the Jointly Developed IP, and all costs, fees and expenses therefor shall be borne by T2 Bio. T2 Bio shall reasonably consider all comments made by Allergan with respect to filing or prosecuting such patent applications and maintaining such patents. In the event T2 Bio does not file an initial patent application on an Invention included in the Jointly Developed IP, Allergan may proceed with filing and prosecution at its own expense. Further, in the event T2 Bio elects not to pursue or elects to abandon the ongoing prosecution of any patent application resulting from the Jointly Developed IP, participate in the filing of any continuation or continuation in part or foreign counterpart to a patent application, or pay any annuity or other patent maintenance fee as it becomes due, T2 Bio shall give Allergan at least one (1) month's notice before any relevant deadline and Allergan shall have the right to pursue, at its expense, the ongoing prosecution and maintenance of such patent application. In such event, T2 Bio shall not be entitled to any refund of prosecution fees previously paid.

**5.2 Enforcement of IP.** If either Party should become aware of any actual or threatened infringement or misappropriation by a Third Party of any Intellectual Property Rights in the Jointly Developed IP (a " ***Joint IP Infringement*** "), it shall promptly notify the other Party in writing, and provide any available information relating to such alleged Joint IP Infringement. The Parties shall promptly discuss whether to bring an enforcement action relating to such Joint IP Infringement prior to either Party (or both Parties) bringing such action. Unless otherwise agreed on a case-by-case basis, T2 Bio shall have the first right, but not the obligation, using outside legal counsel reasonably acceptable to Allergan, to bring an enforcement action relating to such Joint IP Infringement. The costs of such enforcement shall be borne by T2 Bio and any recovery shall be apportioned as agreed by the Parties in advance on a case-by-case basis. In the event that, after the Parties discuss whether to bring an enforcement action, T2 Bio decides not to bring such action, Allergan shall have the right to unilaterally bring an enforcement action with respect to such Joint IP Infringement, in which case Allergan shall bear all of the costs related thereto and shall also receive any and all recovery related thereto. Neither Party is obligated to enforce its Intellectual Property Rights in the event of Joint IP Infringement.

**6. MANUFACTURING, MARKETING AND DISTRIBUTION**

**6.1 Manufacturing.** T2 Bio shall have the exclusive right and shall use commercially reasonable efforts during the Term to manufacture (x) the T2Dx Instrument and (y) each of the Developed Products upon a Developed Product receiving regulatory approval from the FDA, EMA, or other regulatory body.

**6.2 Distribution.** T2 Bio shall have the exclusive right, subject to Section 6.3, and shall use commercially reasonable efforts during the Term, to sell and distribute the Developed Products worldwide, including through its

direct sales force or through Third Party distributors following receipt of regulatory approval from the FDA, EMA, or other regulatory body. In the event a Joint Account or Allergan Account does not have a T2Dx Instrument and wishes to purchase a Developed Product, T2 Bio shall offer to sell and, if applicable, sell a T2Dx Instrument to such account on T2 Bio's customary terms.

**6.3 Co-Marketing of the Developed Products and Certain T2 Bio Products.**

(a) Notwithstanding the foregoing, and subject to the terms and conditions contained in this Section 6.3, Allergan shall have the right to market and sell (the "***Co-Marketing Right***") the products set forth on Exhibit B attached hereto (the "***T2 Bio Co-Marketed Products***") to certain customers including, but not limited to, clinicians, hospitals, institutions and universities, as further described below. Additional products may be added to Exhibit B upon the mutual agreement of the Parties in accordance with Section 12.13.

(b) Within thirty (30) calendar days following (A) in the case of the Developed Products, the date that any of the Developed Products receives regulatory approval by the FDA, EMA, or other regulatory body, (B) in the case of the T2Candida Panel, the date Allergan delivers written notice to T2 Bio of Allergan's intent to exercise the Co-Marketing Right for such product, (C) in the case of the T2Bacteria Panel, the date Allergan delivers written notice to T2 Bio of Allergan's intent to exercise the Co-Marketing Right for such product, which notice may only be delivered after the T2Bacteria Panel receives regulatory approval by the FDA, EMA or other regulatory body, or (D) in the case of any T2 Bio product other than the Developed Products, the T2Candida Panel, or the T2Bacteria Panel, the date that the Parties mutually agree to add a T2 Bio product to Exhibit B (each such date, a "***Co-Marketing Eligibility Date***"), T2 Bio shall deliver to Allergan a list of customers and institutional accounts covered by T2 Bio for the applicable T2 Bio Co-Marketed Products in the United States as of the applicable Co-Marketing Eligibility Date (the "***T2 Bio Accounts***") and will indicate on such list any accounts that T2 Bio proposes to be covered by both T2 Bio and Allergan (the "***Joint Accounts***"). Allergan shall not market or sell any T2 Bio Co-Marketed Products to any T2 Bio Accounts that are not Joint Accounts. Any accounts that are not listed as T2 Bio Accounts (such accounts, the "***Open Accounts***") will be eligible as targets of Allergan marketing efforts for the T2 Bio Co-Marketed Products in accordance with a mutually agreed commercial strategy approved by the JCC (as defined below) pursuant to the terms below. Promptly following the applicable Co-Marketing Eligibility Date, T2 Bio shall use good faith efforts to negotiate with its international distributors in the United Kingdom, France, Spain, Germany, Italy, and Japan the terms and conditions upon which they will agree to allow Allergan to market and sell the T2 Bio Co-Marketed Products in their respective territories. If T2 Bio is able, as a result of such negotiations, to allow Allergan to market and sell the T2 Bio Co-Marketed Products in any of such territories, then, within thirty (30) days following such negotiations with the applicable T2 Bio international distributor, T2 Bio shall deliver to Allergan a list of customers and institutional accounts covered by T2 Bio for the applicable T2 Bio Co-Marketed Products in the relevant territory, which list shall be added to and included in the T2 Bio Accounts, and will indicate on such list any accounts that T2 Bio proposes to be covered by both T2 Bio and Allergan, which list shall be added to and included in the Joint Accounts.

(c) Within forty-five (45) calendar days following the applicable Co-Marketing Eligibility Date, Allergan may exercise its Co-Marketing Right for the applicable T2 Bio Co-Marketed Products by delivery of written notification to T2 Bio that it is exercising such right.

(d) If Allergan elects to exercise its Co-Marketing Right, within seventy-five (75) calendar days following the applicable Co-Marketing Eligibility Date:

(I) Allergan shall present T2 Bio with a list of accounts to which Allergan proposes to market and sell the applicable T2 Bio Co-Marketed Products (the " ***Allergan Accounts*** ") and Joint Accounts to which it proposes to market and sell such T2 Bio Co-Marketed Products, and

(II) the Parties shall establish a, or hold a meeting of the, Joint Commercialization Committee (the " ***JCC*** ") comprised of two representatives from each Party to coordinate the Parties' co-marketing and sales efforts. The JCC's responsibilities shall include, but not be limited to: review, at the discretion of T2 Bio, of the T2 Bio pipeline and upcoming product launches; initial approval of the Allergan Accounts and review of any proposed changes to the T2 Bio Accounts, Allergan Accounts, or Joint Accounts; review of any proposed changes to the countries in which accounts are located; the creation of a commercial and branding strategy (including marketing materials) for the joint marketing of the T2 Bio Co-Marketed Products; review of Allergan's sales and marketing plan for the T2 Bio Co-Marketed Products; review of the training plan for Allergan's sales representatives; review of the co-marketing and sales responsibilities of the Parties; coordination of joint press releases, joint public statements, and joint presentations at trade shows; review of the presentation of the joint marketing of the T2 Bio Co-Marketed Products on the Parties' respective websites. The JCC shall hold meetings at least once every calendar quarter, unless mutually agreed by the Parties, at such times and places as mutually determined by the Parties, including by teleconference. The Parties shall identify a primary representative to the JCC (each, a " ***JCC Representative*** ") to act as the point of contact for all matters, including the coordination of field sales activities during the period between JCC meetings and any other matters that arise between the quarterly meetings of the JCC.

(e) All decisions to be made at meetings of the JCC shall be made by the unanimous vote of the members of the JCC. In the event that any matter submitted to a vote of the JCC representatives in attendance at a meeting does not receive unanimous approval, such matter shall be submitted to the T2 Bio Management Representative and the Allergan Management Representative promptly following the meeting. The T2 Bio Management Representative and the Allergan Management Representative shall use reasonable efforts to reach agreement on the matter; provided, however, if after thirty (30) calendar days following the original meeting date they have not reached agreement on the matter, the matter shall be decided by T2 Bio, in its sole discretion.

(f) In the event that Allergan desires to add additional Open Accounts to the Allergan Accounts, Allergan shall communicate the identity of the account and any applicable facts and details regarding such account to the T2 Bio JCC Representative who will promptly discuss the request with the Allergan JCC Representative, and the addition of such account to the Allergan Accounts shall be subject to the mutual agreement of the JCC Representatives.

(g) The JCC shall also establish, by mutual agreement of the Parties, quarterly and annual sales and productivity goals for Allergan with respect to the Allergan Accounts. If, at any time after a Developed Product's commercial launch date in the applicable jurisdiction, T2 Bio desires to convert an Allergan Account to a T2 Bio Account, T2 Bio shall provide written notice thereof to Allergan. Such account will convert to a T2 Bio Account eighteen (18) months following the date T2 Bio delivers such notice; provided, however, that if Allergan has not (A) within six months of the applicable Developed Product's commercial launch date in the applicable jurisdiction, conducted a sales presentation of the T2 Bio Co-Marketed Products in accordance with this Agreement to such Allergan Account or (B) within twelve (12) months of such commercial launch, generated a sale from such Allergan Account, such Allergan Account will convert to a T2 Bio Account forty-five (45) calendar days following the date that T2 Bio delivers notice of such conversion to Allergan. On a product-by-product basis at any time during the

Term upon 30 calendar days' prior written notice, Allergan may cease its marketing and sales efforts (I) to any Allergan Account or Joint Account, and/or (II) for any T2 Bio Co-Marketed Product.

(h) All sales agreements for the T2 Bio Co-Marketed Products will be entered into between T2 Bio and the applicable account (regardless of whether the account is an Allergan Account, T2 Bio Account, or Joint Account). T2 Bio shall be solely responsible for the maintenance and service of all T2Dx Instruments located at any accounts. At mutually agreed times, T2 Bio shall provide sales and product training to Allergan employees on any T2 Bio Co-Marketed Products; provided, that each Party shall bear their respective expenses related to attending such training.

(i) In the event Allergan exercises its Co-Marketing Right, during the Term Allergan shall, in good faith and at its own expense:

(I) market, advertise, promote, and sell the applicable T2 Bio Co-Marketed Products to customers consistent with Allergan's Code of Conduct;

(II) observe all reasonable directions and instructions given to it by T2 Bio in relation to the marketing, advertisement, and promotion of the applicable T2 Bio Co-Marketed Products, including T2 Bio's sales, marketing, and merchandising policies as they exist at the time Allergan exercises its Co-Marketing Right or as they may thereafter be changed by T2 Bio to the extent that these marketing materials, advertisements or promotions refer to such T2 Bio Co-Marketed Products or otherwise use T2 Bio's trademarks and are disclosed to Allergan; provided, however, that (x) Allergan is not required to observe any such directions or instructions that Allergan reasonably believes violates applicable law, and (y) T2 Bio shall be liable for any Third Party claims, actions or suits arising out of Allergan's conformance with T2 Bio directions and instructions provided by T2 Bio to Allergan in writing; and

(III) promptly notify T2 Bio of any complaint or adverse claim about any T2 Bio Co-Marketed Product or its use of which Allergan becomes aware .

(j) T2 Bio Trademarks.

(I) T2 Bio hereby grants to Allergan a fully-paid, royalty-free, non-exclusive, non-transferable, and non-sublicensable license to use T2 Bio trademarks during the Term solely on or in connection with the promotion, advertising, and resale of the T2 Bio Co-Marketed Products in accordance with the terms and conditions of this Agreement. When requested by T2 Bio, Allergan will promptly discontinue the display or use of any trademark to change the manner in which a trademark is displayed or used with regard to the T2 Bio Co-Marketed Products.

(II) During the Term, Allergan shall not: (a) register or apply for registrations, anywhere in the world, for T2 Bio's trademarks or any other trademark that is confusingly similar to T2 Bio's trademarks or that incorporates T2 Bio's trademarks in whole or in confusingly similar part; (b) use any trademark that is confusingly similar to T2 Bio's trademarks; or (c) engage in any action that dilutes or negatively affects, in any material respect, the value of the goodwill pertaining to the T2 Bio trademarks.

**7. ADDITIONAL ALLERGAN ACTIVITIES**

**7.1 Discussions.** The Parties will discuss in good faith opportunities for Allergan and T2 Bio to collaborate in areas such as development of additional tests, and manufacturing and distribution of the Developed Products. Notwithstanding the foregoing, Allergan acknowledges and agrees that T2 Bio is not obligated to collaborate with Allergan to develop

additional tests or have Allergan manufacture or distribute the Developed Products, and that these good faith discussions do not constitute a right of first refusal or a right of first negotiation with respect to any of the foregoing.

**8. CONFIDENTIALITY**

**8.1 Confidential Information.** Each Party (each, a " ***Receiving Party*** ") acknowledges that such Receiving Party may receive non-public information, including technical, financial, operational and other business information of the other Party (the " ***Disclosing Party*** ") and related materials, items, and documents in connection with this Agreement whether disclosed verbally, in writing, in electronic form or by any other means (" ***Confidential Information*** "), but excluding information that: (a) is approved in writing by the Disclosing Party for release by the Receiving Party without restrictions, (b) the Receiving Party can demonstrate by written records was previously known to the Receiving Party, (c) is now public knowledge, or becomes public knowledge in the future, other than through acts or omissions of the Receiving Party, (d) is lawfully obtained by the Receiving Party from sources independent of the Disclosing Party who have a lawful right to disclose such Confidential Information, as demonstrated by competent written records, or (e) is independently developed by the Receiving Party without use of, or reference to, the Disclosing Party's Confidential Information, as demonstrated by competent written records prepared contemporaneously with such independent development.

**8.2 General Restrictions on Use and Disclosure.** The Receiving Party shall not use the Confidential Information of the Disclosing Party except for the purpose of performing its obligations or exercising its rights under this Agreement. The Receiving Party shall take all reasonable measures to protect the secrecy of and avoid disclosure and unauthorized use of the Disclosing Party's Confidential Information. Without limiting the foregoing, the Receiving Party shall implement at least those protections for Confidential Information that the Receiving Party takes to protect its own confidential information of a similar nature, but in any case not less than reasonable protection. The Receiving Party agrees not to distribute, disclose or disseminate in any way or form any Confidential Information to Third Parties or to employees of the Receiving Party, except that the Receiving Party may allow access to the Disclosing Party's Confidential Information to those of its employees and subcontractors who are required to have the information to provide services under this Agreement; provided, however, that such employees and subcontractors have signed or are otherwise subject to an agreement imposing upon such person restrictions on use and disclosure of the Disclosing Party's Confidential Information that are at least as restrictive as those in this Agreement, prior to any disclosure of the Disclosing Party's Confidential Information to such employees or subcontractors. Upon the request of the Disclosing Party, and upon any expiration or termination of this Agreement, the Receiving Party shall promptly return all copies and embodiments of the Disclosing Party's Confidential Information in its possession or control, or destroy it, at the Disclosing Party's option, and shall make reasonable efforts to insure that no further use thereof is made by such Receiving Party's employees or subcontractors.

**8.3 Legal Obligation to Disclose; Permitted Disclosure.** Notwithstanding the foregoing, the Receiving Party may disclose the Disclosing Party's Confidential Information to the extent required by an applicable court order or by applicable law; provided, however, that, if the Receiving Party is so required to disclose any of the Disclosing Party's Confidential Information, it shall give the Disclosing Party reasonable advance notice of such disclosure and use reasonable efforts to secure confidential treatment of such Confidential Information (whether through protective order or otherwise). The Receiving Party shall not reverse engineer, disassemble, decompile, or determine the composition of any formulations, prototypes, software or other tangible objects that embody any of the Disclosing Party's Confidential Information and that are provided to the Receiving Party hereunder. The Receiving Party shall reproduce the Disclosing Party's proprietary rights notices on any copies of the Disclosing Party's Confidential Information, in the same manner in which such notices were set forth in or on the original. The Receiving Party shall immediately notify the Disclosing Party in the event it becomes aware of any unauthorized use or disclosure of the Disclosing Party's Confidential Information.

**8.4 Confidentiality of Agreement and Project.** The existence and the terms of this Agreement and the information concerning the Project shall be treated by the Parties as confidential and only disclosed in accordance with this section and Section 12.3 below.

**9. LIMITATION OF LIABILITY**

EXCEPT IN CONNECTION WITH CLAIMS RESULTING FROM (A) BREACH OF THE LICENSE RESTRICTIONS HEREUNDER, (B) BREACH OF THE CONFIDENTIALITY OBLIGATIONS HEREUNDER, (C) GROSS NEGLIGENCE OR WILLFUL MISCONDUCT BY T2 BIO, ALLERGAN OR THEIR AFFILIATES, OR (D) ANY AMOUNTS PAID TO THIRD PARTIES BY T2 BIO, ALLERGAN OR THEIR AFFILIATES IN CONNECTION WITH ANY THIRD PARTY CLAIM (OTHER THAN A CLAIM FOR LATE FEES (BUT NOT OTHER AMOUNTS) PAYABLE TO THIRD PARTIES WITH RESPECT TO LATE DELIVERY OF THE DEVELOPED PRODUCTS TO THE RELEVANT THIRD PARTY) ARISING OUT OF ANY BREACH OF THIS AGREEMENT BY THE OTHER PARTY (WHICH AMOUNTS, FOR THE AVOIDANCE OF DOUBT, SHALL NOT BE DEEMED TO BE INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES NO MATTER HOW CHARACTERIZED IN ANY ACTION OR SUIT RESULTING FROM SUCH CLAIM): (X) IN NO EVENT SHALL EITHER PARTY HAVE ANY LIABILITY TO THE OTHER, FOR ANY LOST PROFITS OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND IN ANY WAY ARISING OUT OF OR RELATED TO THIS AGREEMENT AND HOWEVER CAUSED AND UNDER ANY THEORY OF LIABILITY, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND (Y) IN NO EVENT SHALL EITHER PARTY'S CUMULATIVE LIABILITY ARISING OUT OF THIS AGREEMENT EXCEED $[***].

**10. REPRESENTATIONS AND WARRANTIES**

**10.1 Representations and Warranties**. Each Party represents and warrants that: (a) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, (b) the performance of its obligations under this Agreement shall not conflict with any other agreements, obligations or duties of such Party, and (c) it shall perform its obligations specified in this Agreement in a professional and workmanlike manner consistent with industry standards and in compliance with all applicable laws. T2 Bio represents that as of the Effective Date, (x) to T2 Bio's knowledge after inquiring of its members of management and outside legal counsel, including intellectual property counsel (a " ***Reasonable Inquiry*** "), the use of T2 Bio Inventions in the development, manufacturing, marketing, and distribution of Developed Products or any T2 Bio Co-Marketed Products in the manner contemplated under this Agreement will not infringe or misappropriate the intellectual property rights of any Third Party, nor has T2 Bio received written notice from a Third Party alleging any such infringement or misappropriation, and (y) to T2 Bio's knowledge after Reasonable Inquiry, no Third Party is infringing or misappropriates T2 Bio Intellectual Property Rights or T2 Bio Inventions.

**10.2 Disclaimer.** EXCEPT AS STATED IN SECTION 10.1, EACH PARTY DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES IN CONNECTION WITH THIS AGREEMENT, INCLUDING ANY IMPLIED WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

**11. TERM AND TERMINATION**

**11.1 Term.** This Agreement shall become effective on the Effective Date and, unless terminated earlier as permitted herein or as otherwise agreed by the Parties in writing, shall remain in effect until the fifth anniversary of the Effective Date (the " ***Initial Term*** ") and shall automatically renew for additional one (1) year periods thereafter (each, a " ***Renewal Term*** " and together with the Initial Term, the " ***Term*** "); provided, that either Party shall have the right to terminate this Agreement (x) at the expiration of the Initial Term upon delivery of written notice of such termination at least sixty (60) calendar days prior to the end of the Initial Term, or (y) after the expiration of the Initial Term on any twelve (12) month anniversary of the Effective Date upon delivery of written notice of such termination at least ninety (90) calendar days prior to any such anniversary. In the event that notice of termination is not delivered in accordance with this section, this Agreement shall automatically renew.

**11.2 Termination for Cause.** A Party may terminate this Agreement if the other Party materially breaches its obligations under this Agreement and does not cure such breach within thirty (30) calendar days after receipt of a written notice identifying such breach from non-breaching Party.

**11.3 Effect of Termination.** Upon termination or expiration of this Agreement, except as otherwise expressly stated herein, all obligations of each Party hereunder to the other shall terminate. The following articles and sections shall survive any expiration or termination of this Agreement: Sections 1, 4.1, 4.2(a)(y), 4.3, 4.4, 4.5, 4.6, 5, 6.1, 6.2, 8, 9, 10, 11.3, and 12.

**12. MISCELLANEOUS**

**12.1 Relationship.** The Parties agree that neither Party is the agent, representative or partner of the other and neither Party has the authority or power to bind or contract in the name of or to create any liability against the other Party in any way or for any purpose. The Parties agree that each Party is an independent contractor and that the relationship between the two Parties shall not constitute a partnership, joint venture, or agency, including for all tax purposes.

**12.2 Assignment.** This Agreement shall not be assigned by either Party to any other entity without the prior written consent of the other Party. Notwithstanding the foregoing, each Party may assign this Agreement to an Affiliate or to an acquirer or successor in interest upon a merger, reorganization, change of control, acquisition or sale of all or substantially all of the assets of such Party to which this Agreement relates and any such assignment shall not require the consent of the other Party. This Agreement shall inure to the benefit of and be binding on the Parties' successors and assigns. Any attempted assignment in violation of this Section 12.2 shall be null and void from the beginning.

**12.3 Publicity.** Attached hereto as Exhibit C is a mutually agreed upon press release that may be issued by T2 Bio following the Effective Date. Other than the press release attached hereto , neither Party shall issue any press release, nor any public disclosure or publication, except to the extent that a disclosure is required by law, concerning this Agreement or conduct of the Project, or except for any disclosure that does not contain any additional information beyond that contained in the attached press release. Except as agreed by the Parties, any such required disclosure shall contain only the minimum disclosure required by such law. Allergan acknowledges and agrees that T2 Bio may be required to issue a press release or otherwise disclose information related to this collaboration due to T2 Bio's public company disclosure obligations. In such event, Allergan shall review such press release or disclosure and be given an opportunity to comment in advance of any such disclosure and, except as otherwise agreed by the Parties, such press release shall contain only the minimum disclosure concerning this Agreement and the Project required by such obligations as agreed by the Parties, or, in the absence of agreement, as determined based on the reasonable opinion of

T2 Bio's outside securities counsel. Otherwise, the Parties may issue individual press releases about the existence of this Agreement, if, and only if, mutually agreed by both Parties. For the avoidance of doubt, but without limiting T2 Bio's right to disclose information as required by law, T2 Bio shall not disclose any non-public information related to the Allergan Inventions and Allergan shall not disclose any non-public information related to the T2 Bio Inventions. Notwithstanding the foregoing, Allergan and T2 Bio agree that, upon execution of this Agreement, they shall issue a mutually agreed press release announcing the existence and purpose of the Agreement.

**12.4 Waiver.** Failure or neglect by either Party to enforce at any time any of the provisions hereof shall not be construed nor shall be deemed to be a waiver of such Party's rights hereunder nor in any way affect the validity of the whole or any part of this Agreement nor prejudice such Party's rights to take subsequent action.

**12.5 Notices.** All notices required or permitted hereunder shall be given in writing, and shall be deemed to have been duly given when delivered by hand, posted by registered first class mail (airmail if international) or sent via recognized overnight couriers (e.g., Federal Express) or sent by email to the Party to which such notice is required to be given at the business address or email addresses stated in this Agreement or to such other address or email address as such Party may have specified to the other in writing. Notices shall be deemed received on the earlier of the following: (a) notices sent by email shall be deemed received on the same day of such sending, (b) notices delivered by hand shall be deemed received the first business day following such delivery, and (c) notices which have been posted or sent via overnight courier shall be deemed received on the second business day following posting.

If to T2 Bio, then addressed to:

T2 Biosystems, Inc.
101 Hartwell Ave.
Lexington, MA 02421
Attn: Legal Department
Email: mgibbs@t2biosystems.com and rdhanda@t2biosystems.com and
jmcdonough@t2biosystems.com

If to Allergan, then addressed to:

Allergan Sales, LLC
Morris Corporate Center III
400 Interpace Parkway
Parsippany, NJ 07054
Attn: Chief Legal Officer
Emails: robert.bailey@allergan.com and david.nicholson@allergan.com

**12.6 Severability.** In the event that any clause, sub-clause or other provision contained in this Agreement shall be determined by any competent authority to be invalid, unlawful, or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.

**12.7 Governing Law.** The rights, obligations and remedies of the Parties under this Agreement shall be governed in all respects by the laws of the State of New York without regard to its conflicts of law principles.

**12.8 Dispute Resolution.** The Parties shall use reasonable efforts to resolve in good faith any claims, controversies or disagreements between the Parties arising from or related to this Agreement (each, a " ***Claim*** ") as promptly as practicable after a Party notifies the other Party in writing of any such Claim (the " ***Notice*** "). If the Parties are unable to resolve a Claim in accordance with this previous sentence within thirty (30) calendar days after the other Party's receipt of the Notice, the Parties agree that such Claim shall be referred to and finally resolved by binding arbitration under the rules of the International Chamber of Commerce (" ***ICC*** "), which are deemed incorporated into this Section 12.8 (the " ***Rules*** ") by three arbitrators, of which each Party shall appoint one (1), the arbitrators so appointed will select the third and final arbitrator. The arbitrators shall have experience in pharmaceutical licensing disputes. Such arbitration shall be conducted in New York, New York, in the English language. The arbitration proceedings including any outcome shall be confidential. Nothing in this Section 12.8 will preclude either Party from seeking equitable interim or provisional relief from a court of competent jurisdiction including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a Claim either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. This Section 12.8 shall not apply to disputes regarding the ownership or infringement of Intellectual Property Rights.

**12.9 Headings; Construction.** The headings to the clauses, sub-clauses, and parts of this Agreement are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Agreement. Any ambiguity in this Agreement shall be interpreted equitably without regard to which Party drafted the Agreement or any provision thereof. The terms "this Agreement," "hereof," "hereunder" and any similar expressions refer to this Agreement and not to any particular section or other portion hereof. As used in this Agreement, the words "include" and "including," and variations thereof, will be deemed to be followed by the words "without limitation" and "discretion" means sole discretion.

**12.10 Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

**12.11 Cumulative Remedies.** No right or remedy herein conferred upon or reserved to a Party is exclusive of any other right or remedy, and each right and remedy shall be cumulative and in addition to any other right or remedy under this Agreement or under applicable law.

**12.12 Force Majeure Events.** Neither Party will be liable for any delays or failures in performance, except with respect to payment obligations, that are directly caused by acts of God, disease, war, terrorism, riots, civil unrest, extraordinary acts by governmental authorities, national or state emergencies, strikes, lockouts, work stoppages or other such labor difficulties (excluding any of the foregoing involving the hindered Party's workforce), fire, or floods, which events were not caused by and could not have been prevented by the hindered Party using reasonable efforts (each, a " ***Force Majeure Event*** ") and provided that the hindered Party uses reasonable efforts to restore its performance as soon as reasonably practicable.

**12.13 Entire Agreement.** This Agreement supersedes any arrangements, understandings, promises or agreements made or existing between the Parties hereto prior to or simultaneously with this Agreement and constitutes the entire understanding between the Parties hereto. Except as otherwise provided herein, no addition, amendment to or modification of this Agreement shall be effective unless it is in writing and signed by and on behalf of both Parties. For clarity, any terms on purchase orders, order acknowledgements, or other similar documents that are not signed by both Parties and incorporated by reference into this Agreement are hereby rejected and are of no force or effect.

*[The next page is the signature page.]*

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date by their duly authorized representatives.

| **T2 BIOSYSTEMS, INC.** | | **ALLERGAN SALES, LLC** | |
|---|---|---|---|
| By: | /s/ John McDonough | By: | /s/ Sigurd Kirk |
| Name: | John McDonough | Name: | Sigurd Kirk |
| Title: | CEO and President | Title: | VP of Corporate Development |

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**EXHIBIT A**

[***]

[***]

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit B**

**T2 Bio Co-Marketed Products**

1. The T2Bacteria II Panel
2. The T2GNR Panel
3. The T2Bacteria Panel
4. The T2Candida Panel

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit C**

**T2 Biosystems Announce Collaboration with Allergan to Develop the First Blood-based Diagnostic Panel to Detect Antimicrobial Resistance**

*-- T2 Biosystems to develop new panel on T2Dx platform and commercialize worldwide while receiving milestone and other payments –*

*-- Panel to aid in rapid bacterial infection diagnosis, including sepsis; enable quicker treatment with life-saving medicines for millions of patients –*

*-- Allergan granted option to co-market suite of diagnostic products in targeted hospitals --*

**LEXINGTON, Mass. , November 1, 2016** –T2 Biosystems, Inc. (NASDAQ: TTOO), a company developing innovative diagnostic products to improve patient health, today announced a collaboration with Allergan to develop a novel diagnostic panel to detect Gram negative bacterial species and antibiotic resistance for patients with serious bacterial infections, including infections leading to sepsis. These products will expand T2 Biosystems' sepsis pipeline and will include the first direct-from-blood diagnostic panel to detect antimicrobial resistance.

Antimicrobial resistance may develop when bacteria have repeated exposure to antibiotics, forcing the survival of only those strains that cannot be treated by typical antimicrobial drugs. One of the most dangerous trends is resistance to an entire class of antibiotics known as carbapenems, because these are often the therapy of last resort for serious Gram negative infections, according to the Centers for Disease Control (CDC). The T2 Biosystems' resistance panel is being developed to specifically identify carbapenem resistance which the CDC considers a serious and urgent threat to public health.

"Our initial sepsis products, T2Candida Test Panel and T2Bacteria, are the first direct from blood sepsis diagnostics that provide species identification in 3 to 5 hours while also detecting 40% or more infections that are completely missed by blood culture which takes 2 to 6 or more days for results. By identifying resistant bacteria in the early hours of sepsis treatment, we can pick up another 10% or more of patients where providing the right antimicrobial drug to the patient may be further delayed – potentially saving more lives and significant costs to hospitals," said John McDonough, chief executive officer of T2 Biosystems. "We are pleased to be collaborating with Allergan, a company with significant expertise and leadership in treating patients with serious bacterial infections. Together, we hope to not only diagnose sepsis more quickly, but also enable the delivery of life-saving medicines more rapidly to the millions of patients at high risk for bacterial infection."

Under the terms of the agreement, Allergan will pay T2 Biosystems $4 million in milestone payments related to the development of the bacterial resistance panel and an expansion of the T2Bacteria Test Panel currently under development. T2 Biosystems retains exclusive worldwide distribution rights for all products developed through this partnership. Allergan has the option to cooperatively market T2 Biosystems' menu of sepsis diagnostics to targeted hospitals around the world through Allergan's leading physician facing institutional sales force.

"We have a strong commitment to developing innovative treatments for serious infections caused by antibiotic-resistant bacteria, including MRSA and multi-drug resistant Gram-negative bacteria. Early identification of patients with antimicrobial resistance can lead to earlier intervention with effective therapy, improving outcomes," said David Melnick, Vice President of Clinical Development and Anti-Infectives at Allergan.

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**About T2 Biosystems**

T2 Biosystems is focused on developing innovative diagnostic products to improve patient health. With two FDA-cleared products targeting sepsis and a range of additional products in development, T2 Biosystems is an emerging leader in the field of *in vitro* diagnostics. The Company is utilizing its proprietary T2 Magnetic Resonance platform, or T2MR, to develop a broad set of applications aimed at lowering mortality rates, improving patient outcomes and reducing the cost of healthcare by helping medical professionals make targeted treatment decisions earlier. T2MR enables the fast and sensitive detection of pathogens, biomarkers and other abnormalities in a variety of unpurified patient sample types, including whole blood, eliminating the time-consuming sample prep required in current methods. For more information, please visit www.t2biosystems.com .

**Forward-Looking Statements for T2**

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact, including, without limitation, the statements above under the heading "2016 Outlook" should be considered forward-looking statements. These forward-looking statements are based on management's current expectations. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the performance of the Company's diagnostic products and the ability to bring such products to market. These and other important factors could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. For more information on risk factors for T2 Biosystems, Inc.'s business, please refer to the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 9, 2016, under the heading "Risk Factors," and other filings the Company makes with the Securities and Exchange Commission from time to time. Any such forward-looking statements represent management's estimates as of the date of this press release. While the Company may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, even if subsequent events cause its views to change. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this press release.

###

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[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit 10.22**

EXECUTION VERSION

**TERM LOAN AGREEMENT**

**dated as of**

**December 30, 2016**

**among**

**T2 BIOSYSTEMS, INC.,**
**as Borrower,**

**the Subsidiary Guarantors from time to time party hereto,**

**the Lenders from time to time party hereto,**

**and**

**CRG SERVICING LLC,**
**as Administrative Agent and Collateral Agent**

**U.S. $50,000,000**

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Table of Contents**





[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Table of Contents**
(continued)





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**Table of Contents**
(continued)





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SCHEDULES AND EXHIBITS

| | | |
|---|---|---|
| Schedule 1 | - | Commitments and Warrant Shares |
| Schedule 7.05(b)(i) | - | Certain Intellectual Property |
| Schedule 7.05(b)(ii) | - | Intellectual Property Exceptions |
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| Schedule 7.06 | - | Certain Litigation |
| Schedule 7.12 | - | Information Regarding Subsidiaries |
| Schedule 7.13(a) | - | Existing Indebtedness of Borrower and its Subsidiaries |
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| Schedule 7.14 | - | Material Agreements of Obligors |
| Schedule 7.15 | - | Restrictive Agreements |
| Schedule 7.16 | - | Real Property Owned or Leased by Borrower or any Subsidiary |
| Schedule 7.17 | - | Pension Matters |
| Schedule 9.05 | - | Existing Investments |
| Schedule 9.10 | - | Transactions with Affiliates |
| Schedule 9.14 | - | Permitted Sales and Leasebacks |
| | | |
| Exhibit A | - | Form of Guarantee Assumption Agreement |
| Exhibit B | - | Form of Notice of Borrowing |
| Exhibit C-1 | - | Form of U.S. Tax Compliance Certificate |
| Exhibit C-2 | - | Form of U.S. Tax Compliance Certificate |
| Exhibit C-3 | - | Form of U.S. Tax Compliance Certificate |
| Exhibit C-4 | - | Form of U.S. Tax Compliance Certificate |
| Exhibit D | - | Form of Compliance Certificate |
| Exhibit E | - | Form of Landlord Consent |
| Exhibit F | - | Form of Subordination Agreement |
| Exhibit G | - | Form of Intercreditor Agreement |

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

TERM LOAN AGREEMENT, dated as of December 30, 2016 (this " ***Agreement*** "), among T2 BIOSYSTEMS, INC., a Delaware corporation (" ***Borrower*** "), the Subsidiary Guarantors from time to time party hereto, the Lenders from time to time party hereto and CRG SERVICING LLC, a Delaware limited liability company (" ***CRG Servicing*** "), as administrative agent and collateral agent for the Lenders (in such capacities, together with its successors and assigns, " ***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:

## SECTION 1
## DEFINITIONS

**1.01 Certain Defined Terms** . As used herein, the following terms have the following respective meanings:

" ***Accounting Change Notice*** " has the meaning set forth in **Section 1.04(a)** .

" ***Act*** " has the meaning set forth in **Section 13.17** .

" ***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 any business, division or line of business or all or substantially all of the assets of any Person engaged in any business, division or line of business, (b) 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 of directors or other governing body, or (c) acquires control of more than 50% of the ownership interest in any Person engaged in any business that is not managed by a board of directors or other governing body.

" ***Affected Lender*** " has the meaning set forth in **Section 2.06(a)** .

" ***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 any Obligor, its Subsidiaries or Affiliates from time to time concerning or relating to bribery or corruption, including, without limitation, the United States Foreign Corrupt Practices Act of 1977.

" ***Anti-Money Laundering Laws*** " means any and all laws, statutes, regulations or obligatory government orders, decrees, ordinances or rules applicable to an Obligor, its Subsidiaries or Affiliates related to terrorism financing or money laundering, including any applicable provision of the Act and The Currency and Foreign Transaction Reporting Act (also known as the "Bank Secrecy Act," 31 U.S.C. §§5311-5330 and 12 U.S.C. §§ 1818(s), 1820(b) and 1951-1959).

" ***Approval Milestone*** " means 510(k) clearance for the marketing of T2Bacteria™ by the United States Food and Drug Administration on or prior to April 30, 2018.

" ***Asset Sale*** " has the meaning set forth in **Section 9.09** .

" ***Asset Sale Net Proceeds*** " means the aggregate amount of the cash proceeds received from any Asset Sale, net of any bona fide costs and expenses incurred in connection with such Asset Sale, plus, with respect to any non-cash proceeds of an Asset Sale, the fair market value of such non cash proceeds as determined by Borrower in its reasonable discretion in accordance with GAAP.

" ***Assignment and Assumption*** " means an assignment and assumption entered into by a Lender and an assignee of such Lender.

" ***Back-End Facility Fee*** " has the meaning set forth in the Fee Letter.

" ***Bankruptcy Code*** " means Title 11 of the United States Code entitled "Bankruptcy."

" ***Benefit Plan*** " means any employee benefit plan as defined in Section 3(3) of ERISA (whether governed by the laws of the United States or otherwise) to which any Obligor or Subsidiary thereof incurs or otherwise has any obligation or liability, contingent or otherwise.

" ***Borrower*** " has the meaning set forth in the introduction hereto.

" ***Borrower Facility*** " means each manufacturing or testing facility occupied or operated by any Obligor the operation of which is subject to the approval or licensing by the United States Food and Drug Administration and/or any other Governmental Approval relating to the manufacture or testing of medical devices and pharmaceutical or diagnostic products.

" ***Borrower Landlord*** " means each landlord relating to any leased Borrower Facility. As of the Closing Date, the Borrower Landlords consisted of: (a) King 101 Hartwell LLC, a Massachusetts limited liability company; (b) 91 Hartwell Avenue Trust; (c) King 4 Hartwell Place, LP, a Delaware limited partnership; and (d) Columbus Day Realty, Inc..

" ***Borrower Lease*** " means each lease agreement relating to any leased Borrower Facility. As of the Closing Date, the Borrower Leases consist of: (a) that certain Lease dated August 6, 2010, as amended by that certain First Amendment to Lease dated November 2011, as further amended by that certain Second Amendment to Lease dated July 11, 2014, and as further amended by that certain Third Amendment to Lease dated May 27, 2015, by and between Borrower and King 101 Hartwell LLC, a Massachusetts limited liability company; (b) that certain License Agreement dated October 31, 2014, as amended by that certain First Amendment to License Agreement dated April 3, 2015, as further amended by that certain Second Amendment to License Agreement dated May 6, 2015, as further amended by that certain Third Amendment to License Agreement dated October 26, 2015, and as further amended by that certain Fourth Amendment to License Agreement dated May 19, 2016, by and between Borrower and 91 Hartwell Avenue Trust; (c) that certain Lease dated November 12, 2014, by and between Borrower and King 4 Hartwell Place, LP, a Delaware limited partnership; and (d) that certain Commercial Lease dated May 6, 2013, as amended by that certain Amendment No. 1 to Commercial Lease dated September 24, 2013, and as further amended by that certain Amendment No. 2 to Commercial Lease dated September 21, 2015, by and between Borrower and Columbus Day Realty, Inc..

" ***Borrower Party*** " has the meaning set forth in **Section 13.03(b)** .

" ***Borrowing*** " means a borrowing consisting of Loans made on the same day by the Lenders according to their respective Commitments (including without limitation a borrowing of a PIK Loan).

" ***Borrowing Date*** " means the date of a Borrowing.

" ***Borrowing Notice Date*** " means, (a) in the case of the first Borrowing, the date of this Agreement and, (b) in the case of a subsequent Borrowing, a date that is at least [***] Business Days prior to the Borrowing Date of such Borrowing.

" ***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.

" ***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 in accordance with GAAP and as shown on such Person's consolidated balance sheet.

" ***Change of Control*** " means (a) the acquisition of ownership, directly or indirectly, beneficially or of record, by any Person or group of Persons acting jointly or otherwise in concert of capital stock representing more than 35% of the aggregate ordinary voting power represented by the issued and outstanding capital stock of Borrower or (b) the acquisition of direct or indirect Control of Borrower by any Person or group of Persons acting jointly or otherwise in concert, in each case whether as a result of a tender or exchange offer, open market purchases, privately negotiated purchases or otherwise; *provided* , for each of clauses (a) and (b), that entities affiliated with any holder of more than 10% of Borrower's issued and outstanding capital stock as of the Closing Date may

collectively acquire, directly or indirectly, beneficially or of record, up to 40% of the aggregate ordinary voting power represented by the issued and outstanding capital stock of Borrower so long as such acquisition is not effected in connection with a transaction as a result of which Borrower ceases to have Equity Interests listed on a national securities exchange or otherwise ceases to be public reporting company.

" ***Claims*** " means any claims, 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.

" ***Closing Date*** " means the date of the first Borrowing.

" ***Code*** " means the Internal Revenue Code of 1986.

" ***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).

" ***Commitment*** " means, with respect to each Lender, the obligation of such Lender to make Loans to Borrower in accordance with the terms and conditions of this Agreement, which commitment is in the amount set forth opposite such Lender's name on **Schedule 1** under the caption "Commitment", as such Schedule may be amended from time to time. The aggregate Commitments on the date hereof equal $50,000,000. For purposes of clarification, the amount of any PIK Loans shall not reduce the amount of the available Commitment.

" ***Commitment Period*** " means the Closing Date through and including July 27, 2018.

" ***Commodity Account*** " has the meaning set forth in the Security Agreement.

" ***Compliance Certificate*** " has the meaning given to such term 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 contracts, licenses, leases, agreements, obligations, promises, undertakings, understandings, arrangements, documents, commitments, entitlements or engagements under which a Person has, or will have, any liability or contingent liability (in each case, whether written or oral, express or implied).

" ***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 Foreign Corporation*** " means a "controlled foreign corporation" as defined in Section 957(a) of the Code.

" ***Copyright*** " has the meaning set forth in the Security Agreement.

" ***Cure Amount*** " has the meaning set forth in **Section 10.03(a)** .

" ***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(b)** .

" ***Defaulting Lender*** " means, subject to **Section 2.05** , any Lender that (a) has failed to perform any of its funding obligations hereunder, including in respect of its Loans, within [***] of the date required to be funded by it hereunder, (b) has notified Borrower or any Lender that it does not intend to comply with its funding obligations or has made a public statement to that effect with respect to its funding obligations hereunder or under other agreements in which it commits to extend credit, or (c) has, or has a direct or indirect parent company that has, (i) become the subject of an Insolvency Proceeding, (ii) had a receiver, conservator, trustee,

administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or a custodian appointed for it, or (iii) taken any action in furtherance of, or indicated its consent to, approval of or acquiescence in any such proceeding or appointment; *provided* that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any equity interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority.

" ***Deposit Account*** " is defined in the Security Agreement.

" ***Disqualified Equity*** " means Equity Interests of a Person subject to repurchase or redemption rights or obligations (excluding repurchases or redemptions at the sole option of such Person), in each case prior to the date that is the 181 st day anniversary of the Maturity Date (other than upon indefeasible payment in full of the Obligations (other than contingent indemnification or reimbursement obligations for which no claim has been made)).

" ***Dollars*** " and " ***$*** " means lawful money of the United States of America.

" ***Eligible Transferee*** " means and includes a commercial bank, an insurance company, a finance company, a financial institution, any investment fund that invests in loans or any other "accredited investor" (as defined in Regulation D of the Securities Act) that is principally in the business of managing investments or holding assets for investment purposes; *provided* that "Eligible Transferee" shall not include (a) any Person that produces, markets or sells, or develops a program to market or sell, a product in direct competition with Borrower or whose active business is in the medical device or medical instrumentation industry, and (b) so long as no Default or Event of Default has occurred and is continuing, any Person whose primary investment strategy, as determined by the transferring Lender in its reasonable discretion, is the investment in distressed debt; *provided* , further, that the foregoing limitation in clause (b) shall cease to apply with respect to any Lender that has engaged in the securitization or other factoring or financing transaction with respect to its lending portfolio.

" ***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.

" ***Equivalent Amount*** " means, with respect to an amount denominated in one currency, the amount in another currency that could be purchased by the amount in the first currency determined by reference to the Exchange Rate at the time of determination.

" ***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 (a) 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 30 days of the occurrence of such event; (b) 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; (c) 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; (d) 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; (e) 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; (f) 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; (g) 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; (h) an event or condition which could 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; (i) 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; (j) 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; (k) 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; (l) 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; (m) 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; (n) 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; (o) receipt from the IRS of notice of the disqualification of any Qualified Plan under Section 401(a) of the Code, or the revocation of the tax-exempt status of any trust forming part of any Qualified Plan under Section 501(a) of the Code; (p) 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 (q) 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 materially increases the liability of any Obligor.

" ***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 and 436 of the Code and Sections 302 and 303 of ERISA.

" ***Essex Lease Agreement*** " means, collectively, that certain Master Lease Agreement, dated as of October 30, 2015, between Essex Capital Corporation, a California corporation, and Borrower, and all amendments, restatements, modifications and supplements thereto.

" ***Event of Default*** " has the meaning set forth in **Section 11.01** .

" ***Exchange Act*** " means the Securities Exchange Act of 1934, as amended.

" ***Exchange Rate*** " means, as of any date, the rate at which any currency (the " ***Pre-Exchange Currency*** ") may be exchanged into another currency (the " ***Post-Exchange Currency*** "), as set forth on such date on the relevant Reuters screen at or about 11:00 a.m. (Central time) on such date. In the event that such rate does not appear on the Reuters screen, the "Exchange Rate" with respect to exchanging such Pre-Exchange Currency into such Post-Exchange Currency shall be determined by reference to such other publicly available service for displaying exchange rates as may be agreed upon by Borrower and Administrative Agent or, in the absence of such agreement, such Exchange Rate shall instead be determined by Administrative Agent by any reasonable method as they deem applicable to determine such rate, and such determination shall be conclusive absent manifest error.

" ***Excluded Account*** " has the meaning assigned to it in the Security Agreement.

" ***Excluded Foreign Subsidiary*** " means any Foreign Subsidiary that is (i) a Controlled Foreign Corporation or (ii) a Foreign Subsidiary owned by a Subsidiary described in clause (i).

" ***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 any Lender, its applicable lending office located in, the jurisdiction imposing such Tax, or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes that are imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment to the extent that the obligation to withhold amounts existed on the date that such Lender becomes a "Lender" under this Agreement or such Lender otherwise acquires such interest in the Loan or Commitment (other than pursuant to an assignment request by Borrower under **Section 5.03(g)** ) or such Lender changes its lending office, except in each case to the extent that, pursuant to **Section 5.03** , amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before

it changed its lending office, (c) any U.S. federal withholding Taxes imposed under FATCA, and (d) Taxes attributable to such Recipient's failure to comply with **Section 5.03(e)** .

" ***Expense Cap*** " has the meaning set forth in the Fee Letter.

" ***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 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, any intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing and any law, regulation or practice adopted pursuant to any such intergovernmental agreement.

" ***Federal Funds Effective Rate*** " means, for any day, the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System arranged by federal funds brokers, as published on the next succeeding Business Day by the Federal Reserve Bank of New York, or, if such rate is not so published for any day that is a Business Day, the average of the quotations for the day of such transactions received by Administrative Agent from three federal funds brokers of recognized standing selected by it.

" ***Fee Letter*** " means that fee letter agreement dated as of the date hereof between Borrower and Administrative Agent.

" ***First-Tier Foreign Subsidiary*** " means an Excluded Foreign Subsidiary that is a direct Subsidiary of an Obligor.

" ***Foreign Lender*** " means a Lender that is not a U.S. Person.

" ***Foreign Subsidiary*** " means a Subsidiary of Borrower that is not a U.S. Person.

" ***GAAP*** " means generally accepted accounting principles in the United States of America 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, clearance, license, franchise, notification, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

" ***Governmental Authority*** " means any nation, government, branch of power (whether executive, legislative or judicial), state, province or 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.

" ***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. The amount of any Guarantee shall be deemed to be the maximum reasonably anticipated liability in respect thereof.

" ***Guarantee Assumption Agreement*** " means a Guarantee Assumption Agreement substantially in the form of **Exhibit A** by an entity that, pursuant to **Section 8.12(a)** , is required to become a "Subsidiary Guarantor" hereunder.

" ***Guaranteed Obligations*** " has the meaning set forth in **Section 14.01** .

" ***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.

" ***Indebtedness*** " of any Person means, without duplication, (a) all obligations of such Person for borrowed money or obligations of such Person with respect to deposits or advances of any kind by third parties, (b) all obligations of such Person evidenced by bonds, debentures, notes 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), (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 and (l) all Disqualified Stock of such Person (excluding accrued dividends that have not increased the liquidation preference of such Disqualified Stock). The Indebtedness of any Person shall 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.

" ***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, and Technical Information, whether registered or not, domestic and foreign. Intellectual Property shall include all:

(a) applications or registrations relating to such Intellectual Property;

(b) rights and privileges arising under applicable Laws with respect to such Intellectual Property;

(c) rights to sue for past, present or future infringements of such Intellectual Property; and

(d) rights of the same or similar effect or nature in any jurisdiction corresponding to such Intellectual Property throughout the world.

" ***Interest-Only Period*** " means the period from and including the first Borrowing Date and through and including the twelfth (12 th ) Payment Date following the first Borrowing Date; *provided* that (a) if Borrower achieves the Approval Milestone and so long as no Default or Event of Default has occurred and is continuing, the Interest-Only Period shall be extended through and including the

sixteenth (16th) Payment Date following the first Borrowing Date and (b) if Borrower achieves the Market Cap Milestone and so long as no Default or Event of Default has occurred and is continuing, the Interest-Only Period shall be extended through and including the twenty-third (23rd) Payment Date following the first Borrowing Date.

"***Interest Period***" means, with respect to each Borrowing, (a) initially, the period commencing on and including the Borrowing Date thereof and ending on and excluding the next Payment Date, and, (b) thereafter, each period beginning on and including the last day of the immediately preceding Interest Period and ending on and excluding the next succeeding Payment Date.

"***Invention***" means any novel, inventive and useful art, apparatus, method, process, machine (including article or device), manufacture or composition of matter, or any novel, inventive and useful improvement in any art, method, process, machine (including 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 capital stock, 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 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 having a term not exceeding [***] arising in connection with the sale of 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; or (d) the entering into of any Hedging Agreement.

"***IRS***" means the U.S. Internal Revenue Service or any successor agency, and to the extent relevant, the U.S. Department of the Treasury.

"***Knowledge***" means, with respect to any Person, the actual knowledge of any Responsible Officer of such Person and, in the case of Borrower, so long as he or she is employed by Borrower or its Subsidiaries, the actual knowledge of John McDonough, Shawn Lynch and Tom Lowery, so long as such Person is an officer of Borrower.

"***Landlord Consent***" means a Landlord Consent substantially in the form of **Exhibit E** or otherwise reasonably acceptable to Administrative Agent.

"***Laws***" means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, guidelines, 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.

"***Lender***" means each Person listed as a "Lender" on a signature page hereto, together with its successors, and each assignee of a Lender pursuant to **Section 13.05(b)**.

"***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.

"***Liquidity***" means the balance of unencumbered (other than Liens securing the Obligations and Liens permitted pursuant to **Section 9.02(c)** and **Section 9.02(j)**; *provided* that, with respect to cash subject to a Lien in connection with Permitted Priority Debt, there is no default under the documentation governing the Permitted Priority Debt) cash and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in an account over which the Secured Parties have a perfected security interest.

"***Loan***" means (a) each loan advanced by a Lender pursuant to **Section 2.01** and (b) each PIK Loan deemed to have been advanced by a Lender pursuant to **Section 3.02(d)**. For purposes of clarification, any calculation of the aggregate outstanding principal amount of Loans on any date of determination shall include both the aggregate principal amount of loans advanced pursuant to **Section 2.01** and not yet repaid, and all PIK Loans deemed to have been advanced and not yet repaid, on or prior to such date of determination.

" ***Loan Documents*** " means, collectively, this Agreement, the Fee Letter, the Security Documents, any subordination agreement or any intercreditor agreement entered into by Administrative Agent (on behalf of the Lenders) with any other creditors of Obligors or any agent acting on behalf of such creditors, and any other present or future document, instrument, agreement or certificate executed by Obligors and delivered to Administrative Agent or any Secured Party in connection with or pursuant to this Agreement or any of the other Loan Documents, all as amended, restated, supplemented or otherwise modified.

" ***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, Lenders having at such time in excess of 50% of the aggregate Commitments (or, if such Commitments are terminated, the outstanding principal amount of the Loans) then in effect, ignoring, in such calculation, the Commitments of and outstanding Loans owing to any Defaulting Lender.

" ***Margin Stock*** " means "margin stock" within the meaning of Regulations U and X.

" ***Market Cap Milestone*** " means achievement by Borrower of an average Market Capitalization of $[***] over a trailing [***] month period on or prior to June 30, 2019.

" ***Market Capitalization*** " means, as of the date of determination, the product of (a) the sum of (i) the number of shares of Borrower's common stock outstanding as of such date of determination and (ii) the number of shares (not included in clause (i)) of Borrower's common stock that would be outstanding if all outstanding in-the-money stock options, warrants and convertible securities were exercised for, or converted into, as applicable, common stock and (b) the closing price of Borrower's common stock on the NASDAQ Global Market on such date of determination.

" ***Material Adverse Change*** " and " ***Material Adverse Effect*** " mean a material adverse change in or effect on (a) the business, condition (financial or otherwise), operations, performance or Property of Borrower and its Subsidiaries taken as a whole, (b) the ability of any Obligor to perform its obligations under the Loan Documents, or (c) the legality, validity, binding effect or enforceability of the Loan Documents or the rights and remedies of Administrative Agent or any Lender under any of the Loan Documents.

" ***Material Agreements*** " means (a) the agreements which are listed in **Schedule 7.14** (as updated by Borrower from time to time in accordance with **Section 7.20** to list all such agreements that meet the description set forth in clauses (b) and (c) of this definition), (b) material inbound and outbound license agreements and (c) all other agreements held by the Obligors from time to time, the absence or termination of any of which would reasonably be expected to result in a Material Adverse Effect; *provided, however,* that "Material Agreements" exclude all: (i) licenses implied by the sale of a product; and (ii) paid-up licenses for commonly available software programs under which an Obligor is the licensee. "Material Agreement" means any one such agreement.

" ***Material Indebtedness*** " means, at any time, any Indebtedness of any Obligor, the outstanding principal amount of which (i) for purposes of **Section 11.01** , exceeds $[***] individually or in the aggregate (or the Equivalent Amount in other currencies) or (ii) for all other purposes, exceeds $[***] individually (or the Equivalent Amount in other currencies).

" ***Material Intellectual Property*** " means, the Obligor Intellectual Property described in **Schedule 7.05(c)** and any other Obligor Intellectual Property after the date hereof the loss of which could reasonably be expected to have a Material Adverse Effect.

" ***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 11.02** .

" ***Maximum Rate*** " has the meaning set forth in **Section 13.18.**

" ***Minimum Required Revenue*** " has the meaning set forth in **Section in 10.02.**

" ***MSC Investment Conditions*** " means that, as of any date, Borrower has on deposit in a collateral account subject to a control agreement in favor of Administrative Agent for the benefit of the Secured Parties an amount equal to or greater than 110% of

the outstanding principal, interest, Back-End Facility Fee and Prepayment Premium (calculated as if the Loans were prepaid in full as of the applicable date), in each case with respect to the Loans.

" ***Multiemployer Plan*** " means any multiemployer plan, as defined in Section 400l(a)(3) of ERISA, to which any ERISA Affiliate incurs or otherwise has any obligation or liability, contingent or otherwise.

" ***Non-Consenting Lender*** " has the meaning set forth in **Section 2.06(a)** .

" ***Non-Disclosure Agreement*** " has the meaning set forth in **Section 13.16** .

" ***Notice of Borrowing*** " has the meaning set forth in **Section 2.02** .

" ***Obligations*** " means, with respect to any Obligor, all amounts, obligations, liabilities, covenants and duties of every type and description owing by such Obligor to any Lender, any other indemnitee hereunder or any participant, to the extent 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 or for the payment of money, including, without duplication, (a) if such Obligor is Borrower, all Loans, (b) all interest, 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, and (c) 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. Notwithstanding the foregoing, "Obligations" shall not include the Warrant Obligations.

" ***Obligor Intellectual Property*** " means Intellectual Property owned by or licensed to any of the Obligors.

" ***Obligors*** " means, collectively, Borrower and the Subsidiary Guarantors and their respective successors and permitted assigns.

" ***OFAC*** " means the Office of Foreign Assets Control of the United States Department of the Treasury.

" ***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 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 Agreement.

" ***Payment Date*** " means each March 31, June 30, September 30, December 31 and the Maturity Date, commencing on the first such date to occur following the first Borrowing Date; *provided* that, if any such date shall occur on a day that is not a Business Day, the applicable Payment Date shall be the next preceding Business Day.

" ***PBGC*** " means the United States Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

" ***Perfection Certificate*** " means that certain Perfection Certificate dated as of the date hereof delivered by Borrower to Administrative Agent.

" ***Permitted Acquisition*** " means any acquisition by Borrower or any of its wholly-owned Subsidiaries, whether by purchase, merger 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; *provided* that:

(a) immediately prior to, and after giving effect thereto, no Default or Event of Default shall have occurred and be continuing or would result therefrom;

(b) all transactions in connection therewith shall be consummated, in all material respects, in accordance with all applicable Laws and in conformity with all applicable Governmental Approvals;

(c) 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 Borrower in connection with such acquisition, shall be owned 100% by an Obligor or any other Subsidiary, and Borrower shall have taken, or caused to be taken, as of the date such Person becomes a Subsidiary of Borrower, each of the actions set forth in **Section 8.12** , if applicable;

(d) Borrower and its Subsidiaries shall be in compliance with the financial covenants set forth in **Section 10.01** and **Section 10.02** on a *pro forma* basis after giving effect to such acquisition; and

(e) 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 related thereto or (ii) shall have a similar customer base as Borrower and/or its Subsidiaries.

" ***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 maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc, (c) any certificate of deposit, time deposit or bankers' acceptance maturing not more than two (2) years after its date of issuance which is issued by any bank organized under the laws of the United States (or any state thereof) and which has (i) a credit rating of A2 or higher from Moody's or A or higher from S&P and (ii) a combined capital and surplus greater than $[***], (d) any publicly traded or SEC-regulated money market funds or other investment vehicles holding any of the foregoing Permitted Cash Equivalent Investments and (e) investments pursuant to Borrower's investment policy, with any changes thereto requiring prior written consent of Administrative Agent.

" ***Permitted Cure Debt*** " means Indebtedness incurred in connection with the exercise of **Section 10.03(a)** (a) that is governed by documentation containing representations, warranties, covenants and events of default no more burdensome or restrictive than those contained in the Loan Documents, (b) that has a maturity date later than the Maturity Date, (c) in respect of which no cash payments of principal or interest are required prior to the Maturity Date and (d) in respect of which the holders of such Indebtedness have agreed in favor of Borrower, Administrative Agent and Lenders (i) that prior to the date on which the Commitments have expired or been terminated and all Obligations (other than contingent indemnification or reimbursement obligations for which no claim has been made) have been paid in full indefeasibly in cash, such holders will not exercise any remedies (other than any conversion rights) available to them in respect of such Indebtedness, (ii) that such Indebtedness is unsecured and (iii) to terms of subordination in substantially the form attached hereto as **Exhibit F** or otherwise reasonably satisfactory to Administrative Agent.

" ***Permitted Indebtedness*** " means any Indebtedness permitted under **Section 9.01** .

" ***Permitted Liens*** " means any Liens permitted under **Section 9.02** .

" ***Permitted Priority Debt*** " means Indebtedness of Borrower under one working capital revolving credit facility, in an amount not to exceed at any time the sum of (i) 80% of the face amount at such time of Borrower's eligible accounts receivable outstanding and securing such Permitted Priority Debt and (ii) 50% of the face amount at such time of Borrower's eligible inventory outstanding and securing such Permitted Priority Debt; *provided* that (a) such Indebtedness, if secured, is secured solely by Borrower's cash (other than proceeds of the Loans and proceeds from the Collateral that does not secure such Permitted Priority

Debt), accounts receivable and inventory but otherwise is not secured by any property (including without limitation any Intellectual Property or proceeds thereof), (b) the holders or lenders thereof have executed and delivered to Administrative Agent an intercreditor agreement in substantially the form of **Exhibit G** and with such changes (if any) as are reasonably satisfactory to Administrative Agent (such consent by Administrative Agent to any such changes not to be unreasonably withheld) and (c) Borrower has achieved the Product Revenue Milestone.

" ***Permitted Priority Liens*** " means (a) Liens permitted under **Section 9.02(c)** , **(d)** , **(e)** , **(f)** , **(g), (h)** , **(i)** , **(j)** , **(k)** , **(m)** , **(o)** and **(p)** , and (b) Liens permitted under **Section 9.02(b)** *provided* that such Liens are also of the type described in **9.02(c)** , **(d)** , **(e)** , **(f)** , **(g), (h)** , **(i)** , **(j)** , **(k)** , **(m)** , **(o)** and **(p)** .

" ***Permitted Refinancing*** " means, with respect to any Indebtedness, any extensions, renewals, refinancings and replacements of such Indebtedness; *provided* that such extension, renewal or replacement (a) shall not increase the outstanding principal amount of such Indebtedness except by an amount equal to the premium or other amount paid and any fees owing under the existing Indebtedness and expenses reasonably incurred in connection with any such extension, renewal, refinancing or replacement (so long as all premiums and bank fees do not exceed five percent (5%) of the total commitments of such Indebtedness) and by an amount equal to any existing commitments unutilized thereunder and capitalized interest or reserves relating thereto, (b) contains terms relating to outstanding principal amount, amortization, maturity, collateral (if any) and subordination (if any), and other material terms taken as a whole no less favorable in any material respect to Borrower and its Subsidiaries or the Secured Parties than the terms of any agreement or instrument governing such existing Indebtedness, (c) shall have an applicable interest rate which does not exceed the rate of interest of the Indebtedness being replaced by more than three percent (3%) and (d) shall not contain any new requirement to grant any lien or security or to give any guarantee that was not an existing requirement of such Indebtedness.

" ***Permitted Subordinated Debt*** " means Indebtedness (a) that is governed by documentation containing representations, warranties, covenants and events of default no more burdensome or restrictive than those contained in the Loan Documents, (b) that has a maturity date later than the Stated Maturity Date, (c) in respect of which no cash payments of principal or interest are required prior to the Stated Maturity Date, (d) that converts into equity immediately upon the occurrence of an Event of Default, and (e) in respect of which the holders have agreed in favor of Borrower and Secured Parties (i) that prior to the date on which the Commitments have expired or been terminated and all Obligations (other than Warrant Obligations) have been paid in full indefeasibly in cash, such holders will not exercise any remedies available to them in respect of such Indebtedness, (ii) that such Indebtedness is and shall remain unsecured, and (iii) to terms of subordination in substantially the form attached hereto as **Exhibit F** or otherwise satisfactory to the Majority Lenders; *provided* that Borrower cannot incur any Permitted Subordinated Debt without prior written consent of Administrative Agent (such consent not to be unreasonably withheld).

" ***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.

" ***PIK Loan*** " has the meaning set forth in **Section 3.02(d)** .

" ***PIK Period*** " means the period beginning on the first Borrowing Date through and including the earlier to occur of (a) the twelfth (12 th ) Payment Date after the first Borrowing Date (or, if Borrower has achieved the Approval Milestone, the sixteenth (16 th ) Payment Date after the first Borrowing Date) and (b) the date on which any Default shall have occurred ( *provided* that, if such Default shall have been cured or waived, the PIK Period shall resume until the earlier to occur of the next Default and the twelfth (12 th ) Payment Date after the first Borrowing Date (or, if Borrower has achieved the Approval Milestone, the sixteenth (16 th ) Payment Date after the first Borrowing Date)).

" ***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)** .

" ***Product*** " means the T2Candida ® Panel and each of its successors.

" ***Product Revenue Milestone*** " means Borrower achieves Revenue from the sale of the Product of at least $[***] during any consecutive [***] period (excluding any upfront, milestone and other one-time payments relating to the sale or commercialization of the Product); *provided* that (a) Borrower shall have delivered to Administrative Agent a notice certifying satisfaction of the Product

Revenue Milestone no later [***] thereafter, (b) Borrower shall have delivered all information reasonably required by Administrative Agent with respect thereto and (c) Administrative Agent shall have been reasonably satisfied with the results of the audit of the Product Revenue Milestone by examining such information, Borrower's books and records and any other information reasonably related thereto.

" ***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 sum of the Commitment (or, if the Commitments are terminated, the outstanding principal amount of the Loans) of such Lender then in effect by (b) the sum of the Commitments (or, if the Commitments are terminated, the outstanding principal amount of the Loans) of all Lenders then in effect.

" ***Qualified Plan*** " means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (a) that is maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or ERISA Affiliate thereof has or could reasonably be expected to have any liability and (b) that is intended to be tax qualified under Section 401(a) of the Code.

" ***Real Property Security Documents*** " means the Landlord Consent and any mortgage or deed of trust or any other real property security document executed or required hereunder to be executed by any Obligor and granting a security interest in real Property owned or leased (as tenant) by any Obligor in favor of the Secured Parties.

" ***Recipient*** " means Administrative Agent, any Lender or any other recipient of any payment to be made by or on account of any Obligation.

" ***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.

" ***Regulatory Approvals*** " means any registrations, licenses, authorizations, permits or approvals issued by any Governmental Authority and applications or submissions related to any of the foregoing.

" ***Related Person*** " means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person's Affiliates.

" ***Requirement of Law*** " means, as to any Person, any statute, law, treaty, rule or regulation or determination, order, injunction or judgment of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its Properties or revenues.

" ***Responsible Officer*** " of any Person means each of the president, chief executive officer, chief financial officer and chief scientific 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*** " has the meaning set forth in **Section 7.15** .

" ***Revenue*** " of a Person means all revenue properly recognized under GAAP, consistently applied, less all rebates, discounts and other price allowances (but without duplication of all such amounts already required to be subtracted under GAAP).

" ***Sanctions*** " means any international economic sanction administered or enforced by the United States Government (including, without limitation, OFAC), the United Nations Security Council, the European Union, Her Majesty's Treasury or other relevant sanctions authority.

" ***Sanctioned Jurisdiction*** " means any country or territory to the extent that such country or territory is the subject of any Sanction.

" ***Sanctioned Person*** " means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by OFAC, the U.S. Department of State, the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority, (b) any Person operating, organized or resident in a Sanctioned Jurisdiction or (c) any Person owned or Controlled by any such person or Persons described in clauses (a) and (b).

" ***Secured Parties*** " means the Lenders, Administrative Agent and any other holder of any Obligation pursuant to the Loan Documents.

" ***Security Agreement*** " means the Security Agreement dated as of the date hereof among the Obligors and Administrative Agent, granting a security interest in the Obligors' personal Property in favor of the Secured Parties.

" ***Security Documents*** " means, collectively, the Security Agreement, each Short-Form IP Security Agreement, each Real Property Security Document, and each other security document, control agreement or financing statement entered into or filed to perfect Liens in favor of the Secured Parties.

" ***Securities Account*** " has the meaning set forth in the Security Agreement.

" ***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 entered into by one or more Obligors in favor of the Secured Parties, each in form and substance reasonably satisfactory to the Majority Lenders.

" ***Solar Capital Loan Agreement*** " means, collectively, that certain Loan and Security Agreement, dated as of July 11, 2014, among Solar Capital Ltd., a Maryland corporation, as collateral agent, the lenders listed on Schedule 1.1 thereof or otherwise a party thereto from time to time, and Borrower.

" ***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.

" ***Specified Financial Covenants*** " has the meaning set forth in **Section 10.03(a)** .

" ***Stated Maturity Date*** " means the twenty-fourth (24 th ) Payment Date following the first Borrowing Date.

" ***Subsidiary*** " means, with respect to any Person (the " ***parent*** ") at any date, any corporation, limited liability company, partnership, association or other entity (a) of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power or, in the case of a partnership, more than 50% of the general partnership interests are, as of such date, owned, controlled or held by the parent and/or one or more subsidiaries of the parent, or (b) that is, as of such date, otherwise Controlled, by the parent and/or one or more subsidiaries of the parent. Unless the context requires otherwise, "Subsidiary" refers to a Subsidiary of Borrower.

" ***Subsidiary Guarantors*** " means each of the Subsidiaries of Borrower identified under the caption "SUBSIDIARY GUARANTORS" on the signature pages hereto and each Subsidiary of Borrower that becomes, or is required to become, a "Subsidiary Guarantor" after the date hereof pursuant to **Section 8.12(a)** or **(b)** .

" ***Substitute Lender*** " has the meaning set forth in **Section 2.06(a)** .

" ***T2 Sub*** " means T2 Biosystems Securities Corporation, a Massachusetts security corporation and wholly-owned 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.

" ***Tax Affiliate*** " means (a) Borrower and its Subsidiaries, (b) each other Obligor and (c) any Affiliate of an Obligor with which such Obligor files or is eligible to file consolidated, combined or unitary Tax returns.

" ***Tax Returns*** " has the meaning set forth in **Section 7.08** .

" ***Technical Information*** " means all trade secrets and other proprietary or confidential information, including 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 and all other proprietary or confidential information, data, plans, specifications, reports, summaries, experimental data, manuals, models, samples, know-how, technical information, systems, methodologies, computer programs, information technology and any other similar information.

" ***Title IV Plan*** " means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (i) that is or within the past six years was maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has or could reasonably be expected to have any liability and (ii) that is, or, as of such relevant time, was, to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA.

" ***Trademarks*** " is defined in the Security Agreement.

" ***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 Borrowings (and the use of the proceeds of the Loans).

" ***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(e)(ii)(B)(3)** .

" ***Warrants*** " means the warrants to purchase Equity Interests of Borrower, issued by Borrower to the Lenders in connection with the Transactions, per the Warrant Shares table on **Schedule I** .

" ***Warrant Obligations*** " means, with respect to any Obligor, all Obligations arising out of, under or in connection with, the Warrants.

" ***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.

" ***Withholding Agent*** " means any Obligor and Administrative Agent.

**1.02 Accounting Terms and Principles** . All accounting determinations required to be made pursuant hereto shall, unless expressly otherwise provided herein, be made in accordance with GAAP. All components of financial calculations made to determine compliance with this Agreement, including **Section 10** , shall be adjusted to include or exclude, as the case may be, without duplication, such components of such calculations attributable to any Acquisition 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.

**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, Annex, Schedule or Exhibit refers to a Section 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, 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"; (h) accounting terms not specifically defined herein shall be construed 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); and (i) any reference to any law shall include all statutory and regulatory provisions consolidating, amending, replacing or interpreting such law and any reference to any law or regulation shall, unless otherwise specified, refer to such law or regulation as amended, modified or supplemented from time to time. Unless otherwise expressly provided herein, references to organizational documents, agreements (including the Loan Documents) and other contractual instruments shall be deemed to include all permitted subsequent amendments, restatements, extensions, supplements and other modifications thereto. Section headings herein and in the other Loan Documents are included for convenience of reference only and shall not affect the interpretation of this Agreement or any other Loan Document.

**1.04** **Changes to GAAP** . If, after the date hereof, any change occurs in GAAP or in the application thereof and such change would cause any amount required to be determined for the purposes of the covenants to be maintained or calculated pursuant to **Section 8** , **9** or **10** to be materially different than the amount that would be determined prior to such change, then:

(a) Borrower will provide a detailed notice of such change (an " ***Accounting Change Notice*** ") to Administrative Agent within 30 days of such change; (b) either Borrower or the Majority Lenders may indicate within 90 days following the date of the Accounting Change Notice that they wish to revise the method of calculating such financial covenants or amend any such amount, in which case the parties will in good faith attempt to agree upon a revised method for calculating the financial covenants;

(c) until Borrower and the Majority Lenders have reached agreement on such revisions, (i) such financial covenants or amounts will be determined without giving effect to such change and (ii) all financial statements, Compliance Certificates and similar documents provided hereunder shall be provided together with a reconciliation between the calculations and amounts set forth therein before and after giving effect to such change in GAAP;

(d) if no party elects to revise the method of calculating the financial covenants or amounts, then the financial covenants or amounts will not be revised and will be determined in accordance with GAAP without giving effect to such change; and

(e) any Event of Default arising as a result of such change which is cured by operation of this **Section 1.04** shall be deemed to be of no effect *ab initio* .

## SECTION 2
## THE COMMITMENT

**2.01** **Commitments** . Each Lender agrees severally, on and subject to the terms and conditions of this Agreement (including **Section 6** ), to make up to two term loans ( *provided* that PIK Loans shall be deemed not to constitute "term loans" for purposes of this **Section 2.01** ) to Borrower, each on a Business Day during the Commitment Period in Dollars in an aggregate principal amount for such Lender not to exceed such Lender's unfunded Commitment; *provided* , *however* , that no Lender shall be obligated to make a Loan in excess of such Lender's Proportionate Share of the applicable amount of borrowing set forth in **Section 6.01(b)** or **Section 6.02(b)** , as applicable, other than PIK Loans. Amounts of Loans repaid may not be reborrowed.

**2.02** **Borrowing Procedures** . Subject to the terms and conditions of this Agreement (including **Section 6** ), each Borrowing (other than a Borrowing of PIK Loans) shall be made on written notice in the form of **Exhibit B** given by Borrower to Administrative Agent not later than 11:00 a.m. (Central time) on the Borrowing Notice Date (a " ***Notice of Borrowing*** ").

**2.03** **Fees** . Borrower shall pay to Administrative Agent and/or the Lenders, as applicable, such fees as described in the Fee Letter.

**2.04 Use of Proceeds** . Borrower shall use the proceeds of the Loans for repayment of all outstanding Indebtedness and obligations under the Solar Capital Loan Agreement, general working capital purposes and corporate purposes and to pay fees, costs and expenses incurred in connection with the Transactions; *provided* that the Lenders shall have no responsibility as to the use of any proceeds of Loans.

**2.05 Defaulting Lenders** .

(a) **Adjustments** . Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as that Lender is no longer a Defaulting Lender, to the extent permitted by applicable law:

(i) **Waivers and Amendments** . Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in **Section 13.04** .

(ii) **Reallocation of Payments** . Any payment of principal, interest, fees or other amounts received by the Lenders for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to **Section 11** or otherwise), shall be applied at such time or times as follows: first, as Borrower may request (so long as no Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement; second, if so determined by the Majority Lenders and Borrower, to be held in a non-interest bearing deposit account and released in order to satisfy obligations of such Defaulting Lender to fund Loans under this Agreement; third, to the payment of any amounts owing to the Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; fourth, so long as no Default exists, to the payment of any amounts owing to Borrower as a result of any judgment of a court of competent jurisdiction obtained by Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and fifth, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; *provided* that if (A) such payment is a payment of the principal amount of any Loans in respect of which such Defaulting Lender has not fully funded its appropriate share and (B) such Loans were made at a time when the conditions set forth in **Section 6** were satisfied or waived, such payment shall be applied solely to pay the Loans of all non-Defaulting Lenders on a *pro rata* basis prior to being applied to the payment of any Loans of such Defaulting Lender. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender pursuant to this **Section 2.05(a)(ii)** shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(b) **Defaulting Lender Cure** . If Borrower and the Majority Lenders agree in writing in their sole discretion that a Defaulting Lender should no longer be deemed to be a Defaulting Lender, that Lender will, to the extent applicable, purchase that portion of outstanding Loans of the other Lenders or take such other actions as necessary to cause the Loans to be held on a *pro rata* basis by the Lenders in accordance with their Proportionate Share, whereupon that Lender will cease to be a Defaulting Lender; *provided* that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of Borrower while that Lender was a Defaulting Lender; and *provided further* that, except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

**2.06 Substitution of Lenders.**

(a) **Substitution Right** . If any Lender (an " ***Affected Lender*** "), (i) becomes a Defaulting Lender or (ii) does not consent to any amendment, waiver or consent to any Loan Document for which the consent of the Majority Lenders is obtained but that requires the consent of other Lenders (a " ***Non-Consenting Lender*** "), then (x) Borrower may elect to pay in full such Affected Lender with respect to all Obligations due to such Affected Lender or (y) either Borrower or Administrative Agent shall identify any willing Lender or Affiliate of any Lender or Eligible Transferee (in each case, a " ***Substitute Lender*** ") to substitute for such Affected Lender; *provided* that any substitution of a Non-Consenting Lender shall occur only with the consent of Administrative Agent.

(b) **Procedure** . To substitute such Affected Lender or pay in full all Obligations owed to such Affected Lender, Borrower shall deliver a notice to such Affected Lender. The effectiveness of such payment or substitution shall be subject to the delivery by Borrower (or, as may be applicable in the case of a substitution, by the Substitute Lender) of (i) payment for the account of such Affected Lender, of, to the extent accrued through, and outstanding on, the effective date for such payment or substitution, all Obligations then owing to such Affected Lender (which for the avoidance of doubt, shall not include any Prepayment Premium) and (ii) in the case of a substitution, an Assignment and Assumption executed by the Substitute Lender, which shall thereunder, among other things, agree to be bound by the terms of the Loan Documents.

(c) **Effectiveness** . Upon satisfaction of the conditions set forth in **Sections 2.06(a)** and **(b)** , Administrative Agent shall record such substitution or payment in the Register, whereupon (i) in the case of any payment in full of an Affected Lender, such Affected Lender's Commitments shall be terminated and (ii) in the case of any substitution of an Affected Lender, (A) such Affected Lender shall sell and be relieved of, and the Substitute Lender shall purchase and assume, all rights and claims of such Affected Lender under the Loan Documents, except that the Affected Lender shall retain such rights under the Loan Documents that expressly provide that they survive the repayment of the Obligations and the termination of the Commitments, (B) such Affected Lender shall no longer constitute a "Lender" hereunder and such Substitute Lender shall become a "Lender" hereunder and (C) such Affected Lender shall execute and deliver an Assignment and Assumption to evidence such substitution; *provided* , *however* , that the failure of any Affected Lender to execute any such Assignment and Assumption shall not render such sale and purchase (or the corresponding assignment) invalid.

## SECTION 3
## PAYMENTS OF PRINCIPAL AND INTEREST

**3.01 Repayment** .

(a) **Repayment** . During the Interest-Only Period, no scheduled payments of principal of the Loans shall be due. Borrower agrees to repay to the Lenders the outstanding principal amount of the Loans, on each Payment Date occurring after the Interest-Only Period, in equal installments. The amounts of such installments shall be calculated by dividing (i) the sum of the aggregate principal amount of the Loans outstanding on the first day following the end of the Interest-Only Period, by (ii) the number of Payment Dates remaining prior to and including the Stated Maturity Date.

(b) **Application** . Any optional or mandatory prepayment of the Loans shall be applied to the installments thereof under **Section 3.01(a)** pro rata with respect to each payment due on the subsequent Payment Date in the case of any such prepayment that is made after the end of the Interest-Only Period. To the extent not previously paid, the principal amount of the Loans, together with all other outstanding Obligations, shall be due and payable on the Maturity Date.

**3.02 Interest** .

(a) **Interest Generally** . Subject to **Section 3.02(d)** , Borrower agrees to pay to the Lenders interest on the unpaid principal amount of the Loans, for the period from the applicable Borrowing Date until paid in full, at a rate *per annum* equal to 12.50%; provided that, if Borrower achieves the Approval Milestone and so long as no Default or Event of Default has occurred and is continuing, commencing with the first month thereafter, Borrower agrees to pay such interest at a rate *per annum* equal to 11.50%.

(b) **Default Interest** . Notwithstanding the foregoing, upon the occurrence and during the continuance of any Event of Default, the interest payable pursuant to **Section 3.02(a)** shall increase at the election of the Majority Lenders or automatically upon an Event of Default under **Sections 11.01(a)** , **(b)** (with respect to interest), **(h)** , **(i)** or **(j)** by 4.00% *per annum* (such aggregate increased rate, the " ***Default Rate*** "). Notwithstanding any other provision herein (including **Section 3.02(d)** ), if interest is required to be paid at the Default Rate, it shall be paid entirely in cash. If any Obligation other than the unpaid principal amount of the Loans is not paid when due under the applicable Loan Document, the amount thereof shall accrue interest at a rate equal to 4.00% *per annum* (without duplication of interest payable at the Default Rate).

(c) **Interest Payment Dates** . Subject to **Section 3.02(d)** , 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.

(d) **Paid In-Kind Interest** . Notwithstanding **Section 3.02(a)** , at any time during the PIK Period, Borrower may elect to pay the interest on the outstanding principal amount of the Loans payable pursuant to **Section 3.01** as follows: (i) if Borrower has not achieved the Approval Milestone and so long as no Default or Event of Default has occurred and is continuing, (1) only 8.50% of the 12.50% *per annum* interest in cash and (2) 4.00% of the 12.50% *per annum* interest as interest paid in-kind and (ii) if Borrower has achieved the Approval Milestone and so long as no Default or Event of Default has occurred and is continuing, (1) only 8.00% of the 11.50% *per annum* interest in cash and (2) 3.50% of the 11.50% *per annum* interest as interest paid in-kind, in each case such paid in-kind interest amount shall be added on the date such interest would otherwise be due hereunder to the aggregate principal amount of the Loans (the amount of any such compounded interest being a " ***PIK Loan*** "). The principal amount of each PIK Loan shall accrue interest in accordance with the provisions of this Agreement applicable to the Loans.

(e) **AHYDO Limitation** . Notwithstanding any provision of this Agreement to the contrary, if a Loan would otherwise constitute an "applicable high yield discount obligation" within the meaning of Section 163(i) of the Code (or any successor provisions) for any accrual period on or after the fifth anniversary of the Closing Date, Borrower shall pay in cash the accrued and unpaid interest and original issue discount (determined in accordance with Treasury Regulations §§ 1.1272-1 and 1.1273-1, and treating any cash payments made pursuant to this Agreement, including Section 3.01, Section 3.02 or Section 3.03, as a payment of interest or original issue discount to the extent required by Treasury Regulations § 1.1275-2(a)) in the minimum amount necessary to ensure that the Loan shall not constitute an "applicable high yield discount obligation"; *provided* that any such payment shall be accompanied by the Prepayment Premium applicable to such payment, if any, and any fees payable under the Fee Letter. No partial repayment of such Loan prior to such payment date pursuant to any other provision of this Agreement will alter Borrower's obligation to make the payment pursuant to the preceding sentence. It is the intent of Borrower and Lenders that Section 163(e)(5) of the Code not apply to the Loans.

**3.03 Prepayments** .

(a) **Optional Prepayments** . Upon prior written notice to Administrative Agent delivered pursuant to **Section 4.03** , Borrower shall have the right to optionally prepay in whole or in part the outstanding principal amount of the Loans on any Business Day (a " ***Redemption Date*** ") for an amount equal to the aggregate principal amount of the Loans being prepaid plus the Prepayment Premium plus any accrued but unpaid interest and any fees then due and owing (such aggregate amount, the " ***Redemption Price*** "). The applicable " ***Prepayment Premium*** " shall be an amount calculated pursuant to **Section 3.03(a)(i)** .

(i) If the Redemption Date occurs:

(A) on or prior to the twelfth (12 th ) Payment Date, the Prepayment Premium shall be an amount equal to [***]% of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(B) after the twelfth (12 th ) Payment Date and on or prior to the sixteenth (16 th ) Payment Date, the Prepayment Premium shall be an amount equal to [***]% of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(C) after the sixteenth (16 th ) Payment Date and on or prior to the twentieth (20 th ) Payment Date, the Prepayment Premium shall be an amount equal to [***]% of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(D) after the twentieth (20 th ) Payment Date, there shall be no Prepayment Premium owing on any such Redemption Date.

(ii) To determine the aggregate outstanding principal amount of the Loans, and how many Payment Dates have occurred, as of any Redemption Date for purposes of **Section 3.03(a)** :

(A) if, as of such Redemption Date, Borrower shall have made only one Borrowing, the number of Payment Dates shall be deemed to be the number of Payment Dates that shall have occurred following the first Borrowing Date;

(B) if, as of such Redemption Date, Borrower shall have made more than one Borrowing, then the Redemption Price shall equal the sum of multiple Redemption Prices calculated with respect to the Loans of each Borrowing, each of which Redemption Prices shall be calculated based on solely the aggregate outstanding principal amount of the Loans borrowed in such Borrowing (and PIK Loans subsequently borrowed in respect of interest payments thereon), as though the applicable number of

Payment Dates equals the number of Payment Dates that shall have occurred following the applicable Borrowing Date. In the case of any partial prepayment, the amount of such prepayment shall be allocated to Loans made in the various Borrowings (and PIK Loans in respect thereof) in the order in which such Borrowings were made;

(iii) No partial prepayment shall be made under this **Section 3.03(a)** in connection with any event described in **Section 3.03(b)** .

The Prepayment Premium payable upon any prepayment shall be in addition to any payments required pursuant to the Fee Letter.

(b) **Mandatory Prepayments.**

(i) **Asset Sales** . In the event of any contemplated Asset Sale or series of Asset Sales (other than any Asset Sale permitted under **Section 9.09(a)** through **(g)** , **(i)** , **(j)** and **(k)** ) yielding Asset Sale Net Proceeds in excess of $[***] in the aggregate, to the extent Borrower has not optionally prepaid the Loans pursuant to **Section 3.03(a)** with the Asset Sale Net Proceeds from such Asset Sale, Borrower shall provide [***] days' prior written notice of such Asset Sale to Administrative Agent and, if within such notice period Majority Lenders or Administrative Agent advise Borrower that the Majority Lenders require a prepayment pursuant to this **Section 3.03(b)(i)** , Borrower shall: (x) if the assets sold represent substantially all of the assets or Revenues of Borrower, or represent any specific line of business which either on its own or together with other lines of business sold over the term of this Agreement account for Revenue generated by such lines of business exceeding [***]% of the Revenue of Borrower in the immediately preceding year, prepay the aggregate outstanding principal amount of the Loans in an amount equal to the Redemption Price applicable on the date of such Asset Sale in accordance with **Section 3.03(a)** , and (y) in the case of all other Asset Sales not described in the foregoing **clause (x)** , prepay the Loans in an amount equal to the entire amount of the Asset Sale Net Proceeds of such Asset Sale, plus any accrued but unpaid interest and any fees then due and owing, credited in the following order:

(A) first, in reduction of Borrower's obligation to pay any unpaid interest and any fees then due and owing (including any fees payable pursuant to the Fee Letter);

(B) second, in reduction of Borrower's obligation to pay any Claims or Losses referred to in **Section 13.03** then due and owing;

(C) third, in reduction of Borrower's obligation to pay any amounts due and owing on account of the unpaid principal amount of the Loans;

(D) fourth, in reduction of any other Obligation then due and owing; and

(E) fifth, to Borrower or such other Persons as may lawfully be entitled to or directed by Borrower to receive the remainder.

(ii) **Change of Control** . To the extent Borrower has not optionally prepaid the Loans pursuant to **Section 3.03(a)** , in the event of a Change of Control, Borrower shall provide notice of such Change of Control to Administrative Agent [***] days prior to the expected consummation of such Change of Control and, if within [***] days of receipt of such notice Majority Lenders or Administrative Agent notify Borrower in writing that the Majority Lenders require a prepayment pursuant to this **Section 3.03(b)(ii)** , Borrower shall prepay the aggregate outstanding principal amount of the Loans in an amount equal to the Redemption Price applicable on the date of such Change of Control in accordance with **Section 3.03(a)** and any fees payable pursuant to the Fee Letter.

## SECTION 4
## PAYMENTS, ETC.

**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 an account to be designated by Administrative Agent by written notice to Borrower, which may be by email, not later

than 4:00 p.m. (Central 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 Obligor shall, at the time of making each payment under this Agreement or any other Loan Document, specify to Administrative Agent the amounts payable by such Obligor hereunder to which such payment is to be applied (and in the event that Obligors fail to so specify, or if an Event of Default has occurred and is continuing, the Lenders may apply such payment in the manner they determine to be appropriate).

(c) **Non-Business Days** . If the due date of any payment under this Agreement (other than of principal of or interest on the Loans) 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.

**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.

**4.03** **Notices** . Each notice of optional prepayment shall be effective only if received by Administrative Agent not later than 4:00 p.m. (Central time) on the date [***] Business Days prior to the date of prepayment (or such shorter period as may be agreed to in Administrative Agent's sole discretion). Each notice of optional prepayment shall specify the amount to be prepaid and the date of prepayment.

**4.04** **Set-Off** .

(a) **Set-Off Generally** . Upon the occurrence and during the continuance of any Event of Default, each of Administrative Agent, each Lender and each of their Affiliates (which are either managed by such Lender or under common management with such Lender) is 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 Administrative Agent, any Lender and any such Affiliates to or for the credit or the account of any Obligor against any and all of the Obligations, whether or not such Person shall have made any demand and although such obligations may be unmatured. Administrative Agent and each Lender agree promptly to 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 Administrative Agent, each Lender and such Affiliates under this **Section 4.04** are in addition to other rights and remedies (including other rights of set-off) that such Persons may have.

(b) **Exercise of Rights Not Required** . Nothing contained herein shall require Administrative Agent, any Lender or any such Affiliates referred to in **Section 4.04(a)** to exercise any such right or shall affect the right of such Person to exercise, and retain the benefits of exercising, any such right with respect to any other indebtedness or obligation of any Obligor.

**4.05** **Pro Rata Treatment** .

(a) Unless Administrative Agent shall have been notified in writing by any Lender prior to the proposed date of any Borrowing that such Lender will not make the amount that would constitute its share of such Borrowing available to Administrative Agent, Administrative Agent may assume that such Lender has made such amount available to Administrative Agent on such date in accordance with **Section 2** , and Administrative Agent may, in reliance upon such assumption, make available to Borrower a corresponding amount. If such amount is not in fact made available to Administrative Agent by the required time on the applicable Borrowing Date therefor, such Lender and Borrower severally agree to pay to Administrative Agent forthwith, on demand, such corresponding amount with interest thereon, for each day from and including the date on which such amount is made available to Borrower but excluding the date of payment to Administrative Agent, at (i) in the case of a payment to be made by such Lender, a rate equal to the greater of (A) the Federal Funds Effective Rate and (B) a rate reasonably determined by Administrative Agent in accordance with banking industry rules on interbank compensation. If Borrower and such Lender shall pay such interest to Administrative Agent for the same or an overlapping period, Administrative Agent shall promptly remit to Borrower the amount of such interest paid by Borrower for such period. If such Lender pays its share of the applicable borrowing to Administrative Agent, then the amount so paid shall constitute such Lender's Loan included in such borrowing. Any payment by Borrower shall be without prejudice to any claim Borrower may have against a Lender that shall have failed to make such payment to Administrative Agent.

(b) Unless Administrative Agent shall have received notice from Borrower prior to the date on which any payment is due to Administrative Agent for the account of the Lenders hereunder that Borrower will not make such payment, Administrative

Agent may assume that Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders the amount due. In such event, if Borrower has not in fact made such payment, then each of the Lenders severally agrees to repay to Administrative Agent forthwith on demand the amount so distributed to such Lender, with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to Administrative Agent, at the greater of the Federal Funds Effective Rate and a rate determined by Administrative Agent in accordance with banking industry rules on interbank compensation. Nothing herein shall be deemed to limit the rights of Administrative Agent or any Lender against any Obligor.

(c) If any Lender shall obtain any payment (whether voluntary, involuntary, through the exercise of any right of set-off, or otherwise) on account of the principal of or interest on any Loan made by it or other obligations hereunder, as applicable (other than pursuant to a provision hereof providing for non-pro rata treatment), in excess of its Proportionate Share, of such payment on account of the Loans, such Lender shall (i) notify Administrative Agent of the receipt of such payment, and (ii) within five (5) Business Days of such receipt purchase (for cash at face value) from the other Lenders, as applicable (directly or through Administrative Agent), without recourse, such participations in the Loans made by them or make such other adjustments as shall be equitable, as shall be necessary to cause such purchasing Lender to share the excess payment ratably with each of the other Lenders in accordance with their respective Proportionate Shares, as applicable; *provided* , *however* , that (A) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest and (B) the provisions of this paragraph shall not be construed to apply to (x) any payment made by Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender) or (y) any payment obtained by a Lender as consideration for the assignment or sale of a participation in any of its Loans to any assignee or participant, other than to Borrower or any of its Affiliates (as to which the provisions of this paragraph shall apply). Borrower agrees that any Lender so purchasing a participation from another Lender pursuant to this **Section 4.05(c)** may exercise all its rights of payment (including the right of set-off) with respect to such participation as fully as if such Lender were the direct creditor of Borrower in the amount of such participation. No documentation other than notices and the like referred to in this **Section 4.05(c)** shall be required to implement the terms of this **Section 4.05(c)** . Administrative Agent shall keep records (which shall be conclusive and binding in the absence of manifest error) of participations purchased pursuant to this **Section 4.05(c)** and shall in each case notify the Lenders following any such purchase. Borrower consents on behalf of itself and each other Obligor to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against each Obligor rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of each Obligor in the amount of such participation.

(d) Notwithstanding anything to the contrary contained herein, the provisions of this **Section 4.05** shall be subject to the express provisions of this Agreement that require or permit differing payments to be made to non-Defaulting Lenders as opposed to Defaulting Lenders.

## SECTION 5
## YIELD PROTECTION, ETC.

**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 of the Lenders (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, and the result of any of the foregoing is to increase the cost to such Lender of making or maintaining the Loans, or to reduce the amount of any sum received or receivable by such Lender under this Agreement or any other Loan Document, by an amount deemed by such Lender 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 pay to such Lender within [***] days of demand such additional amount or amounts as will compensate such Lender for such increased cost or reduction.

(b) **Change in Capital Requirements** . If a Lender shall have determined in its reasonable discretion 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, upon written request stating the reasons for such request, Borrower shall pay to such Lender within [***] days of demand such additional amount or amounts as will compensate such Lender (or its parent) for such reduction; *provided* that Borrower shall only be required to pay such amounts if such Lender demands such amounts from all other borrowers of such Lender determined by such Lender in its reasonable discretion to be similarly situated as Borrower.

(c) **Notification by Lender** . Each Lender (directly or through Administrative Agent) will promptly notify Borrower in writing of any event of which it has knowledge, occurring after the date hereof, which will entitle such 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 additional amount or amounts to be paid to it hereunder, shall be conclusive and binding on Borrower in the absence of manifest error; *provided* that Borrower shall only be required to pay such amounts if such Lender demands such amounts from all other borrowers of such Lender determined by such Lender in its reasonable discretion to be similarly situated to Borrower.

(d) 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; *provided* that Borrower shall only be required to pay such amounts if such Lender demands such amounts from all other borrowers of such Lender determined by such Lender in its reasonable discretion to be similarly situated to Borrower.

**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 reasonable 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, to the extent that such Lender notifies all similarly situated borrowers of such Lender, (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 and be applicable to Borrower, 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)** .

**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 requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent 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 the applicable Obligor shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings 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 been made.

(b) **Payment of Other Taxes by Borrower** . The Obligors shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of Administrative Agent, timely reimburse it for the payment of, Other Taxes.

(c) **Evidence of Payments** . As soon as practicable after any payment of Taxes by any Obligor to a Governmental Authority pursuant to this **Section 5.03** , such Obligor shall deliver to Administrative Agent the original or a certified copy of a

receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to Administrative Agent.

(d) **Indemnification** . The Obligors shall jointly and severally reimburse and indemnify each Recipient, within [***] 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 Administrative Agent), or by Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) **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 Administrative Agent, at the time or times reasonably requested by Borrower or Administrative Agent such properly completed and executed documentation reasonably requested by Borrower or 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 Administrative Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower or Administrative Agent as will enable Borrower or 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(e)(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, in the event that Borrower is a U.S. Person:

(A) any Lender that is a U.S. Person shall deliver to Borrower and 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 Administrative Agent), executed originals 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 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 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, executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (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, IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (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) executed originals 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 C-1** 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 the applicable 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 originals of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI (or successor form), IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form), a U.S. Tax Compliance Certificate substantially in the form of **Exhibit C-2** or **Exhibit C-**

**3** , 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 substantially in the form of **Exhibit C-4** on behalf of each such direct and indirect partner.

(C) any Foreign Lender shall, if requested by Borrower or Administrative Agent and to the extent it is legally entitled to do so, deliver to Borrower and Administrative Agent (in such number of copies as shall be reasonably 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 Administrative Agent), executed originals of any other form prescribed by applicable law and requested by Borrower or Administrative Agent 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 and requested to permit Borrower or 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 Administrative Agent at the time or times reasonably requested by Borrower or Administrative Agent such documentation requested by Borrower or Administrative Agent as is prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) or otherwise reasonably requested by Borrower or Administrative Agent as may be necessary for Borrower and Administrative Agent to comply with their withholding obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this **Section 5.03(e)(ii)(D)** , "FATCA" shall include any amendment made to FATCA after the date of this Agreement.

(iii) Each Lender agrees that if any form or certification it previously made available becomes inaccurate in any respect, or if Borrower or Administrative Agent notifies such Recipient that any form or certification such Lender previously made available has expired or becomes obsolete in any respect, such Lender shall update such form or certification or promptly notify Borrower and Administrative Agent in writing of its legal inability to do so.

(f) **Treatment of Certain Refunds** . If any party 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** (including by the payment of additional amounts pursuant to this **Section 5** ), 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 5** 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 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(f)** , in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this **Section 5.03(f)** 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 indemnification payments or additional amounts giving rise to such refund had never been paid. This **Section 5.03(f)** 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.

(g) **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. Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment and delegation.

**SECTION 6**
**CONDITIONS PRECEDENT**

**6.01 Conditions to the First Borrowing** . The obligation of each Lender to make a Loan as part of the first Borrowing shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Lenders:

(a) **Borrowing Date** . Such Borrowing shall be made on the date hereof.

(b) **Amount of First Borrowing** . The amount of such Borrowing shall equal $40,000,000.

(c) **Terms of Material Agreements, Etc** . Lenders shall be reasonably satisfied with the terms and conditions of all of the Obligors' Material Agreements.

(d) **No Law Restraining Transactions** . No applicable law or regulation shall restrain, prevent or, in the reasonable judgment of the Lenders, impose materially adverse conditions upon the Transactions.

(e) **Payment of Fees** . Lenders shall be satisfied with the arrangements to deduct the fees set forth in the Fee Letter (including, without limitation, the financing fee required pursuant to the Fee Letter) from the proceeds advanced.

(f) **Lien Searches** . Lenders shall be satisfied with Lien searches regarding Borrower and its Subsidiaries made prior to such Borrowing.

(g) **Documentary Deliveries** . The Lenders shall have received the following documents, each of which shall be in form and substance satisfactory to the Lenders:

(i) **Agreement** . This Agreement duly executed and delivered by Borrower and each of the other parties hereto.

(ii) **Security Documents** .

(A) The Security Agreement, duly executed and delivered by each of the Obligors.

(B) [Reserved.]

(C) Each of the Short-Form IP Security Agreements, duly executed and delivered by the applicable Obligor.

(D) Original share certificates or other documents or evidence of title with regard to all Equity Interests owned by the Obligors (to the extent that such Equity Interests are certificated), together with share transfer documents, undated and executed in blank.

(E) Duly executed control agreements in favor of Administrative Agent for the benefit of the Secured Parties for all Deposit Accounts, Securities Accounts and Commodity Accounts owned by the Obligors in the United States, other than such accounts with Comerica Bank.

(F) Evidence of filing of UCC-1 financing statements against each Obligor in its jurisdiction of formation or incorporation, as the case may be.

(G) Evidence of filing of each of the Short-Form IP Security Agreements in the United States Patent and Trademark Office or the United States Copyright office, as applicable.

(H) Without limitation, all other documents and instruments reasonably required to perfect the Secured Parties' Lien on, and security interest in, the Collateral required to be delivered on or prior to such Borrowing Date shall have been duly executed and delivered and be in proper form for filing, and shall create in favor of the Secured Parties, a perfected Lien on, and security interest in, the Collateral, subject to no Liens other than Permitted Liens.

(iii) **Fee Letter** . The Fee Letter duly executed and delivered by Borrower and Administrative Agent.

(iv) **Warrants** . For the Lenders, *pro rata* in accordance with their Proportionate Shares, the Warrants, duly executed by Borrower (for such number of shares as indicated on **Schedule 1** ).

(v) **Perfection Certificate** . The Perfection Certificate duly executed and delivered by Borrower.

(vi) **Approvals** . Copies of all material licenses, consents, authorizations and approvals of, and notices to and filings and registrations with, any Governmental Authority (including all foreign exchange approvals), and of all third-party consents and approvals, necessary in connection with the making and performance by the Obligors of the Loan Documents and the Transactions.

(vii) **Corporate Documents** . Certified copies of the constitutive documents of each Obligor (if publicly available in such Obligor's jurisdiction of formation) and of resolutions of the board of directors (or shareholders, if applicable) of each Obligor authorizing the making and performance by it of the Loan Documents to which it is a party.

(viii) **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 Obligors.

(ix) **Officer's Certificate** . A certificate, dated such Borrowing Date and signed by the President, a Vice President or a financial officer of Borrower, confirming compliance with the conditions set forth in **Section 6.03** .

(x) **Opinions of Counsel** . A favorable opinion, dated such Borrowing Date, of counsel to each Obligor in form acceptable to the Lenders and their counsel.

(xi) **Insurance** . Certificates of insurance evidencing the existence of all insurance required to be maintained by Borrower pursuant to **Section 8.05(b)** and the designation of Administrative Agent as the lender's loss payees or additional named insured, as the case may be, thereunder.

(xii) **Payoff Letter** . A duly executed and delivered payoff letter with respect to the Solar Capital Loan Agreement in form and substance satisfactory to Administrative Agent.

**6.02 Conditions to Subsequent Borrowings** . The obligation of each Lender to make a Loan as part of a subsequent Borrowing is subject to the following conditions precedent, which shall have been satisfied or waived in writing by the Lenders:

(a) **Borrowing Date** . Such Borrowing shall occur on or prior to July 27, 2018.

(b) **Amount of Borrowing** . The amount of such Borrowing shall equal up to $10,000,000 and be in an increment of $5,000,000.

(c) **Borrowing Milestone** . The Approval Milestone shall have occurred.

(d) **Notice of Milestone Achievement and Audit** . Borrower shall have delivered to Administrative Agent a notice certifying satisfaction of the condition set forth in **Section 6.02(c)** no later than [***] calendar days thereafter, and the Lenders shall have been reasonably satisfied with the results of its audit of Borrower's Revenue by examining Borrower's books and records.

(e) **Notice of Borrowing.** A Notice of Borrowing shall have been received no later than [***] calendar days after satisfaction of the condition set forth in **Section 6.02(c)** .

(f) **Financing Fee.** Except in the case of any PIK Loan, Administrative Agent shall have received, for the account of each Lender, the fees payable pursuant to the Fee Letter.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**6.03** **Conditions to Each Borrowing** . The obligation of each Lender to make a Loan as part of any Borrowing (including the first Borrowing) is also subject to satisfaction of the following further conditions precedent on the applicable Borrowing Date, which shall have been satisfied or waived in writing by the Lenders:

(a) **Commitment Period** . Except in the case of any PIK Loan, such Borrowing Date shall occur during the Commitment Period.

(b) **No Default; Representations and Warranties** . Both immediately prior to the making of such Loan and after giving effect thereto and to the intended use thereof:

(i) no Default shall have occurred and be continuing; and

(ii) the representations and warranties made in **Section 7** shall be true and correct in all material respects (unless qualified by materiality or Material Adverse Effect, in which case they shall be true and correct in all respects) on and as of the Borrowing Date, and immediately after giving effect to the application of the proceeds of the Borrowing, with the same force and effect as if made on and as of such date (except that the representation regarding representations and warranties that refer to a specific earlier date shall be that they were true and correct in all material respects (unless qualified by materiality or Material Adverse Effect, in which case they shall be true and correct in all respects) on such earlier date).

(c) **Notice of Borrowing** . Except in the case of any PIK Loan, Administrative Agent shall have received a Notice of Borrowing as and when required pursuant to **Section 2.02** .

Each Borrowing shall constitute a certification by Borrower to the effect that the conditions set forth in this **Section 6.03** have been fulfilled as of the applicable Borrowing Date.

## SECTION 7
## REPRESENTATIONS AND WARRANTIES

Each Obligor represents and warrants to Administrative Agent and the Lenders that:

**7.01** **Power and Authority** . Each of Borrower and its Subsidiaries (a) is a duly organized and validly existing under the laws of its jurisdiction of organization, (b) has all requisite corporate or other applicable 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 could 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 and where failure so to qualify could reasonably be expected (either individually or in the aggregate) to have a Material Adverse Effect, and (d) has full power, authority and legal right to make and perform each of the Loan Documents to which it is a party and, in the case of Borrower, to borrow the Loans hereunder.

**7.02** **Authorization; Enforceability** . The Transactions are within each Obligor's corporate or other applicable powers and have been duly authorized by all necessary corporate or other applicable action and, if required, by all necessary shareholder action. This Agreement has been duly executed and delivered by each Obligor 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).

**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 third party, except for (i) such as have been obtained or made and are in full force and effect and (ii) filings and recordings in respect of the Liens created pursuant to the Security Documents, (b) will not violate (i) the charter, bylaws or other organizational documents of Borrower and its Subsidiaries or (ii) any applicable law or regulation or any order of any Governmental Authority, other than any such violations in the case of this clause (ii) that, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect, (c) will not violate or result in a default under any Material Agreement or agreement creating or evidencing any Material Indebtedness, 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 Borrower and its Subsidiaries.

**7.04 Financial Statements; Material Adverse Change.**

(a) **Financial Statements** . Borrower has heretofore furnished to the Lenders 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 Borrower and its Subsidiaries as of such dates and for such periods in accordance with GAAP, subject to year-end audit adjustments and the absence of footnotes in the case of the statements previously-delivered statements of the type described in **Section 8.01(b)** . Neither Borrower nor any of its Subsidiaries has any material contingent liabilities or unusual forward or long-term commitments not disclosed in the aforementioned financial statements.

(b) **No Material Adverse Change** . Since December 31, 2015, there has been no Material Adverse Change.

**7.05 Properties** .

(a) **Property Generally** . Each Obligor has good and marketable fee simple title to, or valid leasehold interests in, all its real and personal Property material to its business, subject only to Permitted Liens and except for minor defects in title that do not interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) **Intellectual Property** . The Obligors represent and warrant to the Lenders as follows, as of the date hereof, each Borrowing Notice Date and each Borrowing Date:

(i) **Schedule 7.05(b)(i)** (as amended from time to time by Borrower in accordance with **Section 7.20** ) contains:

(A) a complete and accurate list of all applied for or registered Patents, owned by or licensed to any Obligor, including the jurisdiction and patent number;

(B) a complete and accurate list of all applied for or registered Trademarks, owned by or licensed to any Obligor, including the jurisdiction, trademark application or registration number and the application or registration date; and

(C) a complete and accurate list of all applied for or registered Copyrights, owned by or licensed to any Obligor;

(ii) Each Obligor either (a) owns all right title and interest in and to the Obligor Intellectual Property material to Borrower's business, free and clear of any Liens or Claims of any kind whatsoever other than Permitted Liens or (b) has the right to use any Obligor Intellectual Property material to Borrower's business licensed to such Obligor to the extent necessary for the operation of such Obligor's business as it is currently conducted or currently contemplated to be conducted. Without limiting the foregoing, and except as set forth in **Schedule 7.05(b)(ii)** :

(A) other than with respect to the Material Agreements, or as permitted by **Section 9.09** , the Obligors have not transferred ownership of Material Intellectual Property, in whole or in part, to any other Person who is not an Obligor;

(B) other than (i) the Material Agreements, (ii) customary restrictions in in-bound licenses of Intellectual Property and non-disclosure agreements, or (iii) as would have been or is permitted by **Section 9.09** , there are no judgments, covenants not to sue, permits, grants, licenses, Liens (other than Permitted Liens), Claims, or other agreements or arrangements relating to the Obligors' Material Intellectual Property, including any development, submission, services, research, license or support agreements, which bind, obligate or otherwise restrict the Obligors in any manner that could reasonably be expected to have a Material Adverse Effect;

(C) to any Obligor's Knowledge, none of the Obligor Intellectual Property interferes with or constitutes a misappropriation of any valid rights arising under any Intellectual Property of any other Person;

(D) there are no pending or, to any Obligor's Knowledge, threatened Claims against the Obligors asserted by any other Person relating to the Obligor Intellectual Property, including any Claims of adverse ownership, invalidity, infringement, misappropriation, violation or other opposition to or conflict with such Intellectual Property; no Obligor has received any written notice from any Person that any Obligor business, the use of the Obligor Intellectual Property, or the manufacture, use or sale of any product or the performance of any service by any Obligor infringes upon, violates or constitutes a misappropriation of, or may infringe upon, violate or constitute a misappropriation of, or otherwise interfere with, any other Intellectual Property of any other Person;

(E) no Obligor has any Knowledge that the Obligor Intellectual Property is being infringed, violated, misappropriated or otherwise used by any other Person without the express authorization of the Obligors. Without limiting the foregoing, no Obligor has provided written notice to any other Person of any actual or potential infringement, violation or misappropriation of any of the Obligor Intellectual Property; no Obligor has initiated the enforcement of any Claim with respect to any of the Obligor Intellectual Property material to Borrower's business;

(F) all relevant current and former employees and contractors of each Obligor have executed written confidentiality and invention assignment Contracts with such Obligor that irrevocably assign to such Obligor or its designee all of their rights to any Inventions relating to any of Obligor's business;

(G) to the Knowledge of the Obligors, the Obligor Intellectual Property is all the Intellectual Property necessary for the operation of Obligors' business as it is currently conducted or as currently contemplated to be conducted, except for such Intellectual Property the absence of a license or other rights thereunder thereof could not reasonably be expected to have a Material Adverse Effect;

(H) each Obligor has taken reasonable precautions to protect the secrecy, confidentiality and value of its Obligor Intellectual Property consisting of trade secrets and confidential information, except as could not reasonably be expected to have a Material Adverse Effect;

(I) each Obligor has delivered to Administrative Agent (or posted on a data site accessible to Administrative Agent) accurate and complete copies of all Material Agreements relating to the Obligor Intellectual Property;

(J) there are no pending or, to the Knowledge of any of the Obligors, threatened in writing Claims against the Obligors asserted by any other Person relating to the Material Agreements, including any Claims of breach or default under such Material Agreements;

(iii) With respect to the Material Intellectual Property consisting of Patents, except as set forth in **Schedule 7.05(b)(ii)** , and without limiting the representations and warranties in **Section 7.05(b)(ii)** :

(A) each of the issued claims in such Patents, to Obligors' Knowledge, is valid and enforceable;

(B) the inventors named in such Patents have executed written Contracts with an Obligor or its predecessor-in-interest that properly and irrevocably assigns to an Obligor or predecessor-in-interest all of their rights to any of the Inventions claimed in such Patents to the extent permitted by applicable law;

(C) none of the Patents, or the Inventions claimed in them, have been dedicated to the public except as a result of intentional decisions made by the applicable Obligor;

(D) to any Obligor's Knowledge, all prior art material to such Patents was adequately disclosed to or considered by the respective patent offices during prosecution of such Patents to the extent required by applicable law or regulation;

(E) subsequent to the issuance of such Patents, neither any Obligor nor any other current or prior owner of such Patents, have filed any disclaimer or filed any other voluntary reduction in the scope of the Inventions claimed in such Patents;

(F) no allowable or allowed subject matter of such Patents, to any Obligor's Knowledge, have been the subject of any interference, re-examination or opposition proceedings, nor are the Obligors aware of any basis for any such interference, re-examination or opposition proceedings;

(G) no such Patents, to any Obligor's Knowledge, have ever been finally adjudicated to be invalid, unpatentable or unenforceable for any reason in any administrative, arbitration, judicial or other proceeding, and, with the exception of publicly available documents in the applicable Patent Office recorded with respect to any Patents, no Obligor has received any notice asserting that such Patents are invalid, unpatentable or unenforceable; if any of such Patents is terminally disclaimed to another patent or patent application, all patents and patent applications subject to such terminal disclaimer are included in the Collateral;

(H) no Obligor has received an opinion, whether preliminary in nature or qualified in any manner, which concludes that a challenge to the validity or enforceability of any of such Patents is more likely than not to succeed;

(I) no Obligor has any Knowledge that any Obligor or any current or prior owner of such Patents or their respective agents or representatives have engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate or render unpatentable or unenforceable any such Patents; and

(J) all maintenance fees, annuities, and the like due or payable on the Patents have been timely paid or the failure to so pay was the result of an intentional decision by the applicable Obligor or would not reasonably be expected to result in a Material Adverse Change.

(iv) none of the foregoing representations and statements of fact contains any untrue statement of material fact or omits to state any material fact necessary to make any such statement or representation not misleading in any material respect to a prospective Lender seeking full information as to the Obligor Intellectual Property and the Obligors' business.

(c) **Material Intellectual Property** . **Schedule 7.05(c)** (as amended from time to time by Borrower in accordance with **Section 7.20** ) contains an accurate list of the Obligor Intellectual Property that is material to any Obligor's business with an indication as to whether the applicable Obligor owns or has an exclusive or non-exclusive license to such Obligor Intellectual Property.

**7.06 No Actions or Proceedings** .

(a) **Litigation** . Except as specified in **Schedule 7.06** (as amended from time to time in accordance with **Section 7.20** solely for purposes of each Compliance Certificate), there is no litigation, investigation or proceeding pending or, to any Obligor's Knowledge, threatened with respect to Borrower and its Subsidiaries by or before any Governmental Authority or arbitrator (i) except as individually or in the aggregate could not reasonably be expected to have a Material Adverse Effect or (ii) that involves this Agreement or the Transactions.

(b) **Environmental Matters** . The operations and Property of Borrower and its Subsidiaries comply with all applicable Environmental Laws, except to the extent the failure to so comply (either individually or in the aggregate) could not reasonably be expected to have a Material Adverse Effect.

(c) **Labor Matters** . Borrower and its Subsidiaries have not engaged in unfair labor practices and there are no material labor actions or disputes involving the employees of Borrower or its Subsidiaries.

**7.07 Compliance with Laws and Agreements** . Each of the Obligors is in compliance with all Laws applicable to it or its property and all indentures, agreements and other instruments binding upon it or its property, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. On the date hereof and on each Borrowing Date, no Default has occurred and is continuing.

**7.08 Taxes** . All federal, state, local and foreign income and franchise and other material Tax returns, reports and statements (collectively, the " ***Tax Returns*** ") required to be filed by any Tax Affiliate have been timely filed with the appropriate Governmental Authorities, all such Tax Returns are true and correct in all material respects, and all Taxes reflected therein or otherwise due and payable have been timely paid (except for those contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves are maintained on the books of the appropriate Tax Affiliate in accordance with GAAP). No Tax Return is under audit or examination by any Governmental Authority and no notice of any material audit or examination or any assertion of any claim for Taxes has been given or made in writing by any Governmental Authority. Proper and accurate amounts have been withheld by each Tax Affiliate from their respective employees for all periods in material compliance with the Tax, social security and unemployment withholding provisions of applicable Laws and such withholdings have been timely paid to the respective

Governmental Authorities. No Tax Affiliate has participated in a "listed transaction" within the meaning of Treasury Regulation Section 1.6011-4(b)(2).

**7.09 Full Disclosure** . Borrower has disclosed to Administrative Agent and the Lenders all Material Agreements to which any Obligor is subject, and all other matters to any Obligor's Knowledge, that, individually or in the aggregate, could 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 any Obligor to Administrative Agent or any Lender 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 and taken as a whole, 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.

**7.10 Regulation** .

(a) **Investment Company Act** . Neither Borrower nor any of its Subsidiaries is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940.

(b) **Margin Stock** . Neither Borrower nor any of its Subsidiaries 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.

(c) **OFAC; Sanctions, Etc.** Neither Borrower nor any of its Subsidiaries or, to the knowledge of any Obligor, any Related Person (i) is currently the subject of any Sanctions or is a Sanctioned Person, (ii) is located (or has its assets located), organized or residing in any Sanctioned Jurisdiction, (iii) is or has been (within the previous five (5) years) engaged in any impermissible transaction with any Person who is now or was then the subject of Sanctions or who is located, organized or residing in any Sanctioned Jurisdiction, (iv) directly or indirectly derives revenues from investments in, or transactions with, Sanctioned Persons, (v) has taken any action, directly or indirectly, that would result in a material violation by such Persons of any Anti-Corruption Laws, or (vi) has violated any Anti-Money Laundering Laws in any material respect. No Loan, nor the proceeds from any Loan, has been or will be used, directly or indirectly, to lend, contributed or provide to, or has been or will be otherwise made available to fund, any impermissible activity or business of any Person located, organized or residing in any Sanctioned Jurisdiction or who is the subject of any Sanctions, or in any other manner that will result in any violation by the Lenders of Sanctions. Each of Borrower and its Subsidiaries has implemented and maintains in effect policies and procedures designed to promote compliance by Borrower and its Subsidiaries and their respective directors, officers, employees and agents with the Anti-Corruption Laws.

**7.11 Solvency** . Borrower individually is, and the Obligors (including Borrower) on a consolidated basis are, and, immediately after giving effect to the Borrowing and the use of proceeds thereof will be, Solvent.

**7.12 Subsidiaries** . Set forth on **Schedule 7.12** is a complete and correct list of all Subsidiaries as of the date hereof. Each such Subsidiary is duly organized and validly existing under the jurisdiction of its organization shown in said **Schedule 7.12** , and the percentage ownership by Borrower of each such Subsidiary is as shown in said **Schedule 7.12** .

**7.13 Indebtedness and Liens** . Set forth on **Schedule 7.13(a)** is a complete and correct list of all Indebtedness for borrowed money in an amount greater than $50,000 of each Obligor outstanding as of the date hereof. **Schedule 7.13(b)** is a complete and correct list of all Liens (other than Liens permitted by **Section 9.02(d)** ) granted by Borrower and other Obligors with respect to their respective Property and outstanding as of the date hereof.

**7.14 Material Agreements** . Set forth on **Schedule 7.14** (as amended from time to time by Borrower in accordance with **Section 7.20** ) is a complete and correct list of (i) each Material Agreement and (ii) each agreement creating or evidencing any Material Indebtedness. No Obligor is in material breach under any such Material Agreement or in default under any agreement creating or evidencing any Material Indebtedness. Except as otherwise disclosed on **Schedule 7.14** (as amended from time to time in accordance with **Section 7.20** ), all material vendor purchase agreements and provider contracts of the Obligors are in full force and effect without material modification from the form in which the same were disclosed to Administrative Agent and the Lenders.

**7.15 Restrictive Agreements** . None of the Obligors is subject to any indenture, agreement, instrument or other arrangement that prohibits, restricts or imposes any condition upon (a) the ability of Borrower or any Subsidiary to create, incur or permit to exist any

Lien upon any of its property or assets (other than (i) customary provisions in contracts (including without limitation leases and licenses of Intellectual Property) restricting the assignment thereof, (ii) restrictions or conditions imposed by any agreement governing secured Permitted Indebtedness, to the extent that such restrictions or conditions apply only to the property or assets securing such Indebtedness, (iii) buy-sell arrangements and other restrictions on the Equity Interests of any joint venture and (iv) customary requirements imposed under each Obligor's Organizational Documents for appropriate board or other governing body approvals), or (b) the ability of any Subsidiary to pay dividends or other distributions with respect to any shares of its capital stock or to make or repay loans or advances to Borrower or any other Subsidiary or to Guarantee Indebtedness of Borrower or any other Subsidiary (each, a " ***Restrictive Agreement*** "), except those listed on **Schedule 7.15** or otherwise permitted under **Section 9.11** .

**7.16 Real Property** .

(a) **Generally** . Neither Borrower nor any of its Subsidiaries owns or leases (as tenant thereof) any real property, except as described on **Schedule 7.16** (as amended from time to time by Borrower in accordance with **Section 7.20** ).

(b) **Borrower Lease** . (i) As of the date hereof, Borrower has delivered a true, accurate and complete copy of each Borrower Lease to Administrative Agent.

(ii) Each Borrower Lease is in full force and effect, no material default has occurred under such Borrower Lease and, to the Knowledge of Borrower, there is no existing condition which, but for the passage of time or the giving of notice, could reasonably be expected to result in a material default under the terms of such Borrower Lease.

(iii) Borrower is the tenant under each Borrower Lease and has not transferred, sold, assigned, conveyed, disposed of, mortgaged, pledged, hypothecated, or encumbered any of its interest in, such Borrower Lease.

**7.17 Pension Matters** . **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 and (b) all Multiemployer Plans. Except as could not, in the aggregate, reasonably be expected to result in a Material Adverse Effect, (i) 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, (ii) each Benefit Plan is in compliance with applicable provisions of ERISA, the Code and other Requirements of Law, (iii) 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 could have an obligation or any liability or Claim and (iv) 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 could 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, with respect to any Multiemployer Plan or Title IV Plan, 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.

**7.18 Collateral; Security Interest** . Each Security Document is effective to create in favor of the Secured Parties 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. The Security Documents collectively are effective to create in favor of the Secured Parties a legal, valid and enforceable security interest in the Collateral, which security interests are first-priority (subject only to Permitted Priority Liens).

**7.19 Regulatory Approvals** . Borrower and its Subsidiaries hold, and will continue to hold, either directly or through licensees and agents, all Regulatory Approvals, licenses, permits and similar governmental authorizations of a Governmental Authority necessary or required for Borrower and its Subsidiaries to conduct their operations and business in the manner currently conducted or in the ordinary course of business, except where the failure to do so could not reasonably be expected to result in a Material Adverse Effect.

**7.20 Update of Schedules** . Each of **Schedules 7.05(b)(i)** , **7.05(c)** , **7.06** , **7.14** and **7.16** may be updated by Borrower from time to time in order to reflect any material changes and to ensure the continued accuracy of such Schedule as of any upcoming date on which representations and warranties are made incorporating the information contained on such Schedule. Such update may be

accomplished by Borrower providing to Administrative Agent, in writing (including by electronic means), a revised version of such Schedule in accordance with the provisions of **Section 13.02** . Each such updated Schedule shall be effective immediately upon the receipt thereof by the Lenders.

## SECTION 8
## AFFIRMATIVE COVENANTS

Each Obligor covenants and agrees with Administrative Agent and the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than contingent indemnification or reimbursement obligations for which no claim has been made) have been paid in full in cash:

**8.01 Financial Statements and Other Information** . Borrower will furnish to Administrative Agent:

(a) as soon as available and in any event within [***] days (or such longer period as permitted by the SEC) after the end of the first three fiscal quarters of each fiscal year (or [***] days (or such longer period as permitted by the SEC), in the case of the fourth fiscal quarter), the consolidated balance sheets of the Obligors as of the end of such quarter, and the related consolidated statements of income, shareholders' equity and cash flows of Borrower and its Subsidiaries for such quarter and the portion of the fiscal year through the end of such quarter, prepared in accordance with GAAP consistently applied, 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 Borrower and its Subsidiaries as at such date and the results of operations of Borrower and its Subsidiaries for the period ended on such date and have been prepared in accordance with GAAP consistently applied, subject to changes resulting from normal, year-end audit adjustments and except for the absence of notes; *provided* that, so long as Borrower is subject to the public reporting requirements of the Exchange Act, 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(a)** on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(b) as soon as available and in any event within [***] days after the end of each fiscal year (or such longer period as permitted by the SEC), the consolidated balance sheets of Borrower and its Subsidiaries as of the end of such fiscal year, and the related consolidated statements of income, shareholders' equity and cash flows of Borrower and its Subsidiaries for such fiscal year, prepared 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 a report and opinion thereon of Ernst & Young LLP or another firm of independent certified public accountants of recognized national standing acceptable to the Majority Lenders, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any qualification or exception as to the scope of such audit (other than "going concern" or similar exceptions); *provided* that, so long as Borrower is subject to the public reporting requirements of the Exchange Act, Borrower's filing of an Annual Report on Form 10-K 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) [reserved];

(d) together with the financial statements required pursuant to **Sections 8.01(a)** and **(b)** , a compliance certificate of a Responsible Officer as of the end of the applicable accounting period (which delivery may, unless a Lender requests executed originals, be by electronic communication including fax or email and shall be deemed to be an original authentic counterpart thereof for all purposes) in the form of **Exhibit D** (a " ***Compliance Certificate*** ");

(e) promptly upon receipt thereof, copies of all letters of representation signed by an Obligor to its auditors and copies of all auditor reports delivered for each fiscal quarter;

(f) as soon as available and in any event within [***] days after the end of each fiscal year, a consolidated financial forecast for Borrower and its Subsidiaries for the following five fiscal years, including forecasted consolidated balance sheets, consolidated statements of income, shareholders' equity and cash flows of Borrower and its Subsidiaries;

(g) [reserved];

(h) promptly, and in any event within [***] Business Days after receipt thereof by an Obligor thereof, copies of each notice or other correspondence received from any securities regulator or exchange to the authority of which an Obligor may become subject from time to time concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of such Obligor;

(i) the information regarding insurance maintained by Borrower and its Subsidiaries as required under **Section 8.05** ; and

(j) promptly following Administrative Agent's request at any time, proof of Borrower's compliance with **Section 10.01** .

**8.02 Notices of Material Events** . Borrower will furnish to Administrative Agent written notice of the following promptly after a Responsible Officer first learns of the existence (or within the times periods specified below) of:

(a) the occurrence of (i) any Event of Default or (ii) within [***] Business Days, any event that, upon the giving of notice, the lapse of time or both, would constitute an Event of Default;

(b) notice of the occurrence of any event with respect to an Obligor's property or assets resulting in a Loss aggregating in an amount of $[***] (or the Equivalent Amount in other currencies) or more that is not covered by insurance;

(c) (A) any proposed acquisition of stock, assets or property by any Obligor that would reasonably be expected to result in material environmental liability under Environmental Laws, and (B)(1) 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 (2) all material actions, suits, claims, notices of violation, hearings, investigations or proceedings pending, or to any Obligor's Knowledge, threatened against or affecting Borrower 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 against, or with respect to the activities of, Borrower or any of its Subsidiaries and any alleged violation of or non-compliance with any Environmental Laws or any permits, licenses or authorizations which could reasonably be expected to involve damages in excess of $[***] other than any environmental matter or alleged violation that, if adversely determined, could not reasonably be expected to (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 affecting Borrower or any of its Affiliates that, if adversely determined, could 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 [***] 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 [***] days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to **Section 8.01** , (i) the termination of any Material Agreement; (ii) the receipt by Borrower or any of its Subsidiaries of any material notice under any Material Agreement; (iii) the entering into of any new Material Agreement by an Obligor; or (iv) any material amendment to a Material Agreement;

(h) the reports and notices as required by the Security Documents;

(i) within [***] 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;

(j) promptly after the occurrence thereof, notice of any labor controversy resulting in or reasonably likely to result in any strike, work stoppage, boycott, shutdown or other material labor disruption against or involving an Obligor;

(k) within [***] days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to **Section 8.01** , a licensing agreement or arrangement entered into by Borrower or any Subsidiary in connection with any infringement or alleged infringement of the Intellectual Property of another Person that could reasonably be expected to result in a Material Adverse Effect;

(l) any other development that results in, or could reasonably be expected to result in, a Material Adverse Effect;

(m) concurrently with the delivery of financial statements under **Section 8.01(b)** , the creation or other acquisition of any Material Intellectual Property by Borrower 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 U.S. Copyright Office or the U.S. Patent and Trademark Office, as applicable, or with any other equivalent foreign Governmental Authority;

(n) any change to any Obligor's ownership of Deposit Accounts (other than Excluded Accounts), Securities Accounts and Commodity Accounts, by delivering to Administrative Agent an updated Annex 7 to the Security Agreement setting forth a complete and correct list of all such accounts as of the date of such change;

(o) Within [***] days of request, such information with respect to any Excluded Account as Administrative Agent may from time to time reasonably request (including, but not limited to account statements for the Excluded Accounts); and

(p) such other information respecting the operations, properties, business or condition (financial or otherwise) of the Obligors (including with respect to the Collateral) as Administrative Agent may from time to time reasonably request. Each notice delivered under this **Section 8.02** shall be accompanied by a statement of a financial officer or other executive officer of Borrower setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto, to the extent applicable.

**8.03 Existence; Conduct of Business** . Such Obligor 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 and the rights, licenses, permits, privileges and franchises material to the conduct of its business in the ordinary course of business; *provided* that the foregoing shall not prohibit any merger, amalgamation, consolidation, liquidation or dissolution permitted under **Section 9.03** .

**8.04 Payment of Obligations** . Such Obligor will, and will cause each of its Subsidiaries to, pay and discharge its obligations, including (i) all federal and material other 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 upon any properties or assets of Borrower or any Subsidiary, 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 in accordance with GAAP; and (ii) all lawful claims which, if unpaid, would by law become a Lien upon its property not constituting a Permitted Lien.

**8.05 Insurance** . Such Obligor will, and will cause each of its Subsidiaries to maintain, with financially sound and reputable insurance companies, insurance in such amounts and against such risks as are customarily maintained by companies engaged in the same or similar businesses operating in the same or similar locations. Upon the request of Administrative Agent or the Majority Lenders, such Obligor shall furnish Administrative Agent from time to time with full information as to the insurance carried by it and, if so requested, copies of all such insurance policies. Such Obligor shall use commercially reasonable efforts to ensure, or cause others to ensure, that all insurance policies required under this **Section 8.05** shall provide that they shall not be terminated or cancelled nor shall any such policy be materially changed in a manner adverse to such Obligor without at least [***] days' (or [***] days' for non-payment of premium) prior written notice to such Obligor and Administrative Agent. Receipt of notice of termination or cancellation of any such insurance policies or reduction of coverages or amounts thereunder shall entitle the Secured Parties to renew any such policies, cause the coverages and amounts thereof to be maintained at levels required pursuant to 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 such Obligor (payable on demand). The amount of any such expenses shall accrue interest at the Default Rate if not paid on demand, and shall constitute "Obligations."

**8.06 Books and Records; Inspection Rights** . Such Obligor 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. Such Obligor will, and will cause each of its Subsidiaries to, permit any representatives designated by Administrative Agent, upon reasonable prior notice, 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 (but not more often than [***] unless an Event of Default has occurred and is continuing) as Administrative Agent may request. The Obligors shall pay all reasonable and documented out-of-pocket costs of all such inspections.

**8.07 Compliance with Laws and Other Obligations** . Such Obligor will, and will cause each of its Subsidiaries to, (i) comply in all material respects with all laws, rules, regulations and orders of any Governmental Authority applicable to it or its property (including Environmental Laws) and (ii) comply in all material respects with all terms of Indebtedness and all other Material Agreements, except, in each case, where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

**8.08 Maintenance of Properties, Etc** .

(a) Such Obligor shall, and shall cause each of its Subsidiaries to, maintain and preserve all of its properties necessary or useful in the proper conduct of its business in good working order and condition in accordance with the general practice of other Persons of similar character and size, ordinary wear and tear and damage from casualty or condemnation excepted.

(b) Without limiting the generality of **Section 8.08(a)** , each Obligor shall not terminate, or allow or cause to be terminated or allow to expire, any Borrower Lease if such termination could reasonably be expected to result in a material interruption in the manufacture and testing of, or a material reduction in manufacturing and testing capacity of the Obligors with respect to, the Product or any other products of the Obligors, unless and until, prior to such termination or expiration, such Obligor has executed a lease for a replacement Borrower Facility or has made other accommodations (including consolidation with other facilities) to avoid such interruption or reduction and has received all United States Food and Drug Administration and other Governmental Approvals necessary to operate such replacement Borrower Facility or to implement such other accommodations, as applicable.

**8.09 Licenses** . Such Obligor shall, and shall cause each of its Subsidiaries to, obtain and maintain all material 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 the failure to do so would not reasonably be expected to have a Material Adverse Effect.

**8.10 Action under Environmental Laws** . Such Obligor shall, and shall cause each of its Subsidiaries to, upon becoming aware of the presence of any material Hazardous Materials or the existence of any material 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 reasonably necessary or advisable 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 compliance with applicable Environmental Laws.

**8.11 Use of Proceeds** . The proceeds of the Loans will be used only as provided in **Section 2.04** . No part of the proceeds of the Loans will be used, whether directly or indirectly, for any purpose that entails a violation of any of the Regulations of the Board of Governors of the Federal Reserve System, including Regulations T, U and X.

**8.12 Certain Obligations Respecting Subsidiaries; Further Assurances.**

(a) **Subsidiary Guarantors** . Such Obligor 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 (other than any Excluded Foreign Subsidiary not required to be a Subsidiary Guarantor under **Section 8.12(b)(i)** , are "Subsidiary Guarantors" hereunder. Without limiting the generality of the foregoing, in the event that Borrower or any of its Subsidiaries shall form or acquire any new Subsidiary (other than any new Excluded Foreign Subsidiary not required to be a Subsidiary Guarantor under **Section 8.12(b)(i)** ), such Obligor and its Subsidiaries concurrently will:

(i) cause such new Subsidiary to become a "Subsidiary Guarantor" hereunder, and a "Grantor" under the Security Agreement, pursuant to a Guarantee Assumption Agreement;

(ii) take such action or cause such Subsidiary to take such action (including delivering such shares of stock 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 (A) substantially all of the personal property of such new Subsidiary and (B) all real

property with a fair market value in excess of $[***] owned by such new Subsidiary, in each case 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 Agreement or has not otherwise pledged Equity Interests in its Subsidiaries in accordance with the terms of the Security Agreement and this Agreement, cause the parent of such Subsidiary to execute and deliver a pledge agreement in favor of the Secured Parties in respect of all outstanding issued shares of such Subsidiary; and

(iv) deliver such proof of corporate action, incumbency of officers, opinions of counsel as reasonably requested by Administrative Agent and other documents as is consistent with those delivered by each Obligor pursuant to **Section 6.01** or as Administrative Agent or the Majority Lenders shall have requested.

(b) **Excluded Foreign Subsidiaries** .

(i) In the event that, at any time, Excluded Foreign Subsidiaries have, in the aggregate, (i) total revenues constituting 5% or more of the total revenues of Borrower and its Subsidiaries on a consolidated basis, or (ii) total assets constituting 5% or more of the total assets of Borrower and its Subsidiaries on a consolidated basis, promptly (and, in any event, within [***] days after such time) Obligors shall cause one or more of such Excluded Foreign Subsidiaries to become Subsidiary Guarantors in the manner set forth in **Section 8.12(a)** , such that, after such Subsidiaries become Subsidiary Guarantors, the non-guarantor Excluded Foreign Subsidiaries in the aggregate shall cease to have revenues or assets, as applicable, that meet the thresholds set forth in **clauses (i)** and **(ii)** above; *provided* that no Excluded Foreign Subsidiary shall be required to become a Subsidiary Guarantor if doing so would result in material adverse tax consequences for Borrower and its Subsidiaries, taken as a whole.

(ii) With respect to each First-Tier Foreign Subsidiary that is not a Subsidiary Guarantor, such Obligor shall grant a security interest and Lien in 65% of each class of voting Equity Interest and 100% of all other Equity Interests in such First-Tier Foreign Subsidiaries in favor of the Secured Parties as Collateral for the Obligations. Without limiting the generality of the foregoing, in the event that any Obligor shall form or acquire any new Subsidiary that is a First-Tier Foreign Subsidiary, such Obligor will promptly and in any event within [***] days of the formation or acquisition of such Subsidiary (or such longer time as consented to by Administrative Agent in writing) grant a security interest and Lien in 65% of each class of voting Equity Interests and 100% of all other Equity Interests of such Subsidiary in favor of the Secured Parties as Collateral for the Obligations ( *provided* that in the case of a First Tier Foreign Subsidiary that is a Subsidiary Guarantor, such Obligor shall grant a security interest and Lien in 100% of the Equity Interests of such Subsidiary in favor of the Secured Parties as Collateral for the Obligations), including entering into any necessary local law security documents and delivery of certificated securities issued by such First-Tier Foreign Subsidiary as required by this Agreement or the Security Agreement.

(c) **Further Assurances** . Such Obligor will, and will cause each of its Subsidiaries to, take such action from time to time as shall reasonably be requested by Administrative Agent or the Majority Lenders to effectuate the purposes and objectives of this Agreement.

Without limiting the generality of the foregoing, each Obligor will, and will cause each Person that is required to be a Subsidiary 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 by Administrative Agent or the Majority Lenders to create, in favor of the Secured Parties, perfected security interests and Liens in (A) substantially all of the personal property of such Obligor and (B) all real property with a fair market value in excess of $[***] owned by such Obligor, in each case 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; *provided further* that, notwithstanding any provision under this Agreement or other Loan Document to the contrary, Borrower and its Subsidiaries shall not be required to reimburse legal and filing costs, fees, expenses and other amounts incurred by the Administrative Agent or the Lenders in respect of actions required under this **Section 8.12** or **Section 8.15(b)** under more than three foreign jurisdictions (as selected by the Administrative Agent in its sole discretion) and for more than $15,000 for each such foreign jurisdiction (for an aggregate of $45,000).

**8.13 Termination of Non-Permitted Liens** . In the event that Borrower or any other Obligor shall become aware or be notified by Administrative Agent or any Lender of the existence of any outstanding Lien against any Property of Borrower or such other Obligor, which Lien is not a Permitted Lien, such Obligor shall use its commercially reasonable efforts to promptly terminate or cause the termination of such Lien.

**8.14** **Intellectual Property** . In the event that the Obligors acquire 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 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).

**8.15** **Post-Closing Items** .

(a) Within ninety (90) days after the Closing Date, or such other date as Administrative Agent may in its sole discretion permit, Borrower shall use commercially reasonable efforts to execute and deliver each Real Property Security Document to Administrative Agent.

(b) Within ninety (90) days after the Closing Date, or such other date as Administrative Agent may in its sole discretion permit, Borrower shall deliver (i) such Intellectual Property security agreements duly executed by the applicable Obligor as Administrative Agent may reasonably require with respect to foreign Intellectual Property and (ii) evidence of such foreign filings as Administrative Agent may reasonably require with respect to foreign Intellectual Property.

(c) Within seven (7) Business Days after the Closing Date, or such other date as Administrative Agent may in its sole discretion permit, Borrower shall deliver duly executed control agreements in favor of Administrative Agent for the benefit of the Secured Parties for all Deposit Accounts, Securities Accounts and Commodity Accounts (other than Excluded Accounts) that were not delivered on the Closing Date, including, but not limited to such control agreements with Comerica Bank.

## SECTION 9
## NEGATIVE COVENANTS

Each Obligor covenants and agrees with Administrative Agent and the Lenders that, until the Commitments have expired or been terminated and all Obligations (other than contingent indemnification or reimbursement obligations for which no claim has been made) have been paid in full in cash:

**9.01** **Indebtedness** . Such Obligor 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 **Part II** of **Schedule 7.13(a)** and Permitted Refinancings thereof; *provided* that, in each case, with respect to such Indebtedness, an intercreditor agreement or subordination agreement on terms reasonably satisfactory to the Majority Lenders shall be entered into;

(c) Permitted Priority Debt;

(d) 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 Borrower's or such Subsidiary's business in accordance with customary terms and paid within the specified time, unless contested in good faith by appropriate proceedings and reserved for in accordance with GAAP;

(e) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by any Obligor in the ordinary course of business;

(f) (i) Indebtedness of any Obligor to any other Obligor, (ii) Indebtedness of any non-Obligor to any other non-Obligor, and (iii) Indebtedness of any non-Obligor to any Obligor to the extent permitted pursuant to **Section 9.05(k)** ;

(g) Guarantees by any Obligor of Indebtedness of any other Obligor;

(h) (i) Permitted Cure Debt and (ii) Permitted Subordinated Debt (to the extent Borrower has received prior written consent of Administrative Agent as required by the definition of "Permitted Subordinated Debt");

(i) Indebtedness approved in advance in writing by the Majority Lenders;

(j) Indebtedness incurred pursuant to the Essex Master Lease (or a replacement equipment facility of the Essex Master Lease); *provided* that the aggregate outstanding principal amount of such Indebtedness does not exceed $[***] at any time;

(k) Indebtedness under credit cards used in the ordinary course of business not exceeding $[***] in the aggregate at any time;

(l) Hedging Agreements entered into in the ordinary course of Borrower's financial planning solely to hedge currency risks (and not for speculative purposes) in an aggregate notional amount for all such Hedging Agreements not in excess of $[***] (or the Equivalent Amount in other currencies);

(m) Indebtedness secured by Liens or deposits permitted under **Section 9.02(k)** and **(o)** ;

(n) normal course of business equipment financing; *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 and (ii) the aggregate outstanding principal amount of such Indebtedness does not exceed $[***] (or the Equivalent Amount in other currencies); and

(o) Other Indebtedness not exceeding $[***] in the aggregate at any time.

**9.02 Liens** . Such Obligor will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Lien on any property or asset now owned or hereafter acquired by it, or assign or sell any income or revenues (including accounts receivable) or rights in respect of any thereof, except:

(a) Liens securing the Obligations;

(b) any Lien on any property or asset of Borrower or any of its Subsidiaries existing on the date hereof and set forth in **Part II** of **Schedule 7.13(b)** ; *provided* that (i) no such Lien shall extend to any other property or asset of Borrower or any of its Subsidiaries 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 described in the definition of "Permitted Priority Debt";

(d) Liens imposed by law which were incurred in the ordinary course of business, including (but not limited to) carriers', warehousemen's and mechanics' liens and other similar liens arising in the ordinary course of business and which (x) 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 (y) are being contested in good faith by appropriate proceedings and for which adequate reserves have been made if required in accordance with GAAP;

(e) pledges or deposits made in the ordinary course of business in connection with 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) with respect to any real Property, (A) such defects or encroachments as might be revealed by an up-to-date survey of such real Property; (B) the reservations, limitations, provisos and conditions expressed in the original grant, deed or patent of such property by the original owner of such real Property pursuant to applicable Laws; (C) any leasehold interest in leases or subleases and licenses granted in the ordinary course of business; and (D) rights of expropriation, access or user or any similar right conferred or reserved by or in applicable Laws, which, in the aggregate for (A), (B), (C) and (D), 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;

(i) Bankers liens, rights of setoff and similar Liens incurred on deposits made in the ordinary course of business;

(j) (i) Liens in the form of cash collateral securing Indebtedness permitted under **Section 9.01(k)** and **(l)** and (ii) Liens securing Indebtedness permitted under **Section 9.01(j)** and **(n)** ; *provided* that, in the case of clause (ii), such Liens are restricted solely to the collateral described in **Section 9.01(j)** or **(n)** , as applicable;

(k) deposits to secure the performance of bids, trade contracts, statutory obligations, surety bonds (other than bonds related to judgments or litigation), performance bonds, and other obligations of a like nature incurred in the ordinary course of business;

(l) Liens securing judgments for the payment of money not constituting an Event of Default under **Section 11** or securing appeal or other surety bonds related to such judgments;

(m) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;

(n) Liens on insurance proceeds securing payment of financed insurance premiums that are not overdue (provided that such Liens extend only to such insurance proceeds and not to any other property or assets);

(o) Deposits or letters of credit to provide credit support for real estate leases, in each case not to exceed $[***] in the aggregate outstanding at any time; and

(p) licenses of the Product or Intellectual Property that is permitted under **Section 9.09** ;

*provided* that no Lien otherwise permitted under any of the foregoing **Sections 9.02(b)** through **(p)** shall apply to any Material Intellectual Property.

**9.03 Fundamental Changes and Acquisitions** . Such Obligor will not, and will not permit any of its Subsidiaries to, (i) enter into any transaction of merger, amalgamation or consolidation (ii) liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution), or (iii) make any Acquisition or otherwise acquire any business or substantially all the property from, or capital stock of, or be a party to any acquisition of, any Person, except:

(a) Investments permitted under **Section 9.05(e)** ;

(b) the merger, amalgamation or consolidation of any Subsidiary Guarantor with or into any other Obligor; *provided* that, in the case of a merger, amalgamation or consolidation with or into Borrower, Borrower shall be the surviving entity;

(c) the sale, lease, transfer or other disposition by any Subsidiary Guarantor of any or all of its property (upon voluntary liquidation or otherwise) to any other Obligor; and

(d) the sale, transfer or other disposition of the capital stock of (x) any Subsidiary Guarantor to any other Obligor, (y) any Subsidiary that is not an Obligor to another Subsidiary that is not an Obligor and (z) any Subsidiary to an Obligor; and

(e) Permitted Acquisitions for consideration in an amount not exceeding $[***] in the aggregate.

**9.04 Lines of Business** . Such Obligor 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 Borrower or any Subsidiary or a business reasonably related thereto.

**9.05** **Investments** . Such Obligor 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** ;

(b) operating deposit accounts with banks;

(c) extensions of credit in the nature of accounts receivable, prepaid royalties, notes receivable and other similar items arising from the sales of goods or services in the ordinary course of business;

(d) Permitted Cash Equivalent Investments;

(e) Investments by any Obligor in any Subsidiary Guarantors;

(f) Hedging Agreements entered into in the ordinary course of Borrower's financial planning solely to hedge currency risks (and not for speculative purposes) and in an aggregate notional amount for all such Hedging Agreements not in excess of $[***] (or the Equivalent Amount in other currencies);

(g) Investments consisting of security deposits with utilities and other like Persons made in the ordinary course of business;

(h) employee loans, travel advances and guarantees in accordance with Borrower's usual and customary practices with respect thereto (if permitted by applicable law) which in the aggregate shall not exceed $[***] outstanding at any time (or the Equivalent Amount in other currencies);

(i) 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;

(j) Investments permitted under **Section 9.03** ;

(k) (i) Investments in joint ventures, corporate collaborations, partnerships or similar arrangements, (ii) Investments in Foreign Subsidiaries and (iii) other Investments, *provided* that (x) the cash Investment by Borrower in such Investments for clauses (i), (ii) and (iii) in the aggregate cannot exceed $[***] per calendar year commencing with the calendar year ending December 31, 2017 and increasing by $[***] for each calendar year thereafter, and (y) any non-cash Investments are permitted under **Section 9.09** (other than Sections 9.09(f), (h), (i), (j) and (k));

(l) Investments constituting Permitted Acquisitions (including Investments in Subsidiaries formed for the purpose of merging such Subsidiary into the target of a Permitted Acquisition or for merging the target of a Permitted Acquisition into such Subsidiary so long as, upon the consummation of such Permitted Acquisition, Borrower is in compliance with **Sections 8.12** and **9.03** ); and

(m) if the MSC Investment Conditions have been met and no Default or Event of Default has occurred and is continuing, Investments in T2 Sub for the purpose of holding Investments as a Massachusetts security corporation under 830 CMR 63.38B.1 of the Massachusetts tax code and applicable regulations; *provided* that if at any time the MSC Investment Conditions are not met then (i) Borrower shall promptly cause T2 Sub to distribute to Borrower all assets held by it for deposit into a collateral account subject to a control agreement in favor of Administrative Agent for the benefit of the Secured Parties and (ii) Borrower shall not permit T2 Sub to hold any assets.

**9.06** **Restricted Payments** . Such Obligor 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, except:

(a) Any Obligor may declare and pay dividends with respect to its capital stock payable solely in additional shares of its common stock;

(b) any Subsidiary may pay dividends or distributions to any other Obligor;

(c) Borrower may purchase, redeem, retire, or otherwise acquire 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; and

(d) for the purpose of repurchasing Borrower' stock, where such repurchase is in connection with the issuance of Borrower's stock to management, former employees, consultants or members of the board of directors of Borrower, in an amount not exceeding $[***] in repurchases in any fiscal year.

**9.07 Payments of Indebtedness** . Such Obligor will not, and will not permit any of its Subsidiaries to, make any payments in respect of any Indebtedness other than (a) payments of the Obligations, (b) scheduled payments of Indebtedness and other payments of Indebtedness that is contractually subordinated to the Obligations, in each case, if subordinated, to the extent permitted under the terms of any subordination to the Obligations, (c) repayment of intercompany Indebtedness permitted in reliance upon **Section 9.01(f)** , (d) payments under Permitted Priority Debt, (e) payments in respect of Indebtedness in the form of capital leases and real estate letters of credit of a Subsidiary acquired in connection with a Permitted Acquisition and (f) payments in respect of Indebtedness in the form of trade credit.

**9.08 Change in Fiscal Year** . Such Obligor 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, except to change the fiscal year of a Subsidiary acquired in connection with an Acquisition to conform its fiscal year to that of Borrower.

**9.09 Sales of Assets, Etc** . Such Obligor will not, and will not permit any of its Subsidiaries to, sell, lease, exclusively license (in terms of geography or field of use), transfer, or otherwise dispose of any of its Property (including accounts receivable and capital stock of Subsidiaries) to any Person in one transaction or series of transactions (any thereof, an " ***Asset Sale*** "), except:

(a) transfers of cash in the ordinary course of its business;

(b) sales of inventory in the ordinary course of its business;

(c) development and other collaborative arrangements where such arrangements provide for the licenses under or disclosure of Patents, Trademarks, Copyrights or other Intellectual Property rights where such license requires periodic payments based on per unit sales of a product over a period of time or other consideration and *provided* that such licenses does not effect a legal transfer of title to such Intellectual Property rights and such licenses must be true licenses as opposed to licenses that are sales transactions in substance;

(d) transfers of Property by any Subsidiary Guarantor to any other Obligor;

(e) dispositions of any equipment that is surplus, obsolete or worn out or no longer used or useful in the Business;

(f) any transaction permitted under **Section 9.03** or **9.05** ;

(g) (i) licenses of Obligor Intellectual Property or other property owned by Obligor which may only be exclusive with respect to geographical location outside the US, provided that such licenses must be true licenses as opposed to licenses that are sales transactions in substance; and (ii) non-exclusive licenses of Obligor Intellectual Property;

(h) any other Disposition the Asset Sale Net Proceeds of which are applied as required under **Section 3.03(b)(i)** ;

(i) the sale or licenses, which may be exclusive, of the Obligor Intellectual Property set forth on **Schedule 9.09** relating to the development, commercialization, marketing, distribution and manufacture of the T2HemoStat Panel (and no other field of use); *provided* that (i) immediately prior to the entry into of such transaction, Borrower has achieved a Market Capitalization of at least $[***] on the date of such entry into such license, (ii) no Obligor Intellectual Property that is sold or licensed on an exclusive basis is necessary or useful for the continued commercialization, marketing, distribution, or manufacture of the Product as it then exists or is then contemplated to exist in the future, and (iii) prior to, and after giving effect to, the entry into of such transaction, John McDonough (or other Person acceptable to Administrative Agent) remains the chief executive officer of Borrower;

(j) Asset Sales not exceeding $[***] with the consent of Administrative Agent (such consent not to be unreasonably withheld);

(k) other Asset Sales not exceeding $[***] in the aggregate in any fiscal year.

**9.10 Transactions with Affiliates** . Such Obligor 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 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 Borrower or any Subsidiary in the ordinary course of business,

(d) management, cost-sharing, cost-plus and similar intercompany agreements pursuant to which Obligors provide services, products or inventory to any Foreign Subsidiary in the ordinary course of business; *provided* that (i) such agreements do not require the Obligors to pay such Foreign Subsidiary for any services, products or inventory, and (ii) the terms of any such agreements are no less favorable to the Obligors than those that would be obtained in a comparable arm's-length transaction with a Person not an Affiliate of the Obligors;

(e) Borrower may issue Equity Interests to Affiliates in exchange for cash; *provided* that the terms thereof are no less favorable (including the amount of cash received by Borrower) to Borrower than those that would be obtained in a comparable arm's-length transaction with a Person not an Affiliate of Borrower;

(f) Agreements for the supply or manufacture of tangible products by the investor set forth on **Schedule 9.10(f)** or such investor's Affiliates; *provided* that the terms thereof are no less favorable to the Obligors than those that would be obtained in a comparable arm's-length transaction with a Person not an Affiliate of the Obligors; and

(g) the transactions set forth on **Schedule 9.10(g)** .

**9.11 Restrictive Agreements** . Such Obligor 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 (a) restrictions and conditions imposed by law or by this Agreement and (b) Restrictive Agreements listed on **Schedule 7.15** .

**9.12 Amendments to Material Agreements; Organizational Documents** . Such Obligor will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of any Material Agreement in a manner that is materially adverse to the Lenders or terminate any Material Agreement if such termination is materially adverse to the Lenders. Such Obligor will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of its organizational documents in a manner that could (a) be materially adverse to the rights or remedies of the Lenders under the Loan Documents (other than the Warrants) or (b) prevent any Obligor from fulfilling, or limit any Obligor's ability to fulfill, all of its obligations under the Loan Documents.

**9.13 Operating Leases** . Borrower will not, and will not permit any of its Subsidiaries to, make any expenditures in respect of operating leases, except for:

(i) real estate operating leases;

(ii) operating leases between Borrower and any of its wholly-owned Subsidiaries or between any of Borrower's wholly-owned Subsidiaries; and

(iii) operating leases that would not cause Borrower and its Subsidiaries, on a consolidated basis, to make payments exceeding $[***] (or the Equivalent Amount in other currencies) in any fiscal year.

**9.14** **Sales and Leasebacks** . Except as disclosed on **Schedule 9.14** , such Obligor 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, (i) which Borrower or such Subsidiary has sold or transferred or is to sell or transfer to any other Person and (ii) which Borrower or such Subsidiary intends to use for substantially the same purposes as property which has been or is to be sold or transferred.

**9.15** **Hazardous Material** . Such Obligor 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 could not reasonably be expected to result in a Material Adverse Change.

**9.16** **Accounting Changes** . Such Obligor will not, and will not permit any of its Subsidiaries to, make any significant change in accounting treatment or reporting practices, except as required or permitted by GAAP.

**9.17** **Compliance with ERISA** . No Obligor or any ERISA Affiliate shall cause or suffer to exist any ERISA Event that would, in the aggregate, have a Material Adverse Effect. No Obligor or Subsidiary thereof shall cause or suffer to exist any event that could reasonably be expected to result in the imposition of a Lien with respect to any Benefit Plan or any Title IV Plan or Multiemployer Plan.

## SECTION 10
## FINANCIAL COVENANTS

**10.01** **Minimum Liquidity** . Borrower shall maintain at all times Liquidity in an amount which shall exceed the greater of (i) $[***] and (ii) to the extent Borrower has incurred Permitted Priority Debt, the minimum cash balance, if any, required of Borrower by Borrower's Permitted Priority Debt creditors.

**10.02** **Minimum Revenue** . Borrower and its Subsidiaries shall have annual Revenue from sales of the Product and the licensing of any underlying Obligor Intellectual Property (for each respective calendar year, the " ***Minimum Required Revenue*** "):

(a) during the twelve month period beginning on January 1, 2017, of at least $[***];

(b) during the twenty-four month period beginning on January 1, 2017, of at least $[***];

(c) during the twenty-four month period beginning on January 1, 2018, of at least $[***];

(d) during the twenty-four month period beginning on January 1, 2019, of at least $[***]; and

(e) during the twenty-four month period beginning on January 1, 2020, of at least $[***].

**10.03** **Cure Right** . Notwithstanding anything to the contrary contained in **Section 11** , in the event that Borrower fails to comply with the covenants contained in **Section 10.02(a)** through **(e)** (such covenants for such applicable periods being the " ***Specified Financial Covenants*** "), Borrower shall have the right within [***] days of the end of the respective calendar year to apply cash on hand (other than cash proceeds from the Loans or any Permitted Priority Debt) or proceeds from the issuance of additional shares of Equity Interests (other than Disqualified Equity), Permitted Cure Debt or any licensing, corporate collaboration, development or similar transactions in an amount equal to (x) two (2) multiplied by (y) the Minimum Required Revenue less Borrower's annual Revenue (the " ***Cure Amount*** ") to prepay the Loans (including any fees payable pursuant to the Fee Letter but not including any Prepayment Premium) in accordance with **Section 3.03(a)** . If, after giving effect to the foregoing prepayment, Borrower shall then be in compliance with the requirements of the Specified Financial Covenants, Borrower shall be deemed to have satisfied the requirements of the Specified Financial Covenants as of the relevant date of determination with the same effect as though there had been no failure to comply therewith at such date, and the applicable breach of the Specified Financial Covenants that had occurred, the related Default and Event of Default, shall be deemed cured without any further action of Borrower or Lenders for all purposes under the Loan Documents. For the avoidance of doubt, Borrower shall comply with **Section 10.01** at all times and this **Section 10.03** shall apply only to the Specified Financial Covenants.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**SECTION 11**
**EVENTS OF DEFAULT**

**11.01** **Events of Default** . Each of the following events shall constitute an " ***Event of Default*** ":

(a) Borrower shall fail to pay any principal of any 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;

(b) any Obligor shall fail to pay any Obligation (other than an amount referred to in **Section 11.01(a)** ) when and as the same shall become due and payable, and such failure shall continue unremedied for a period of (i) in the case of Obligations payable on demand and consisting of indemnified amounts or costs, [***] Business Days, and (ii) in all other cases, [***] Business Days;

(c) any representation or warranty made by or on behalf of Borrower 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, when taken as a whole, shall be materially misleading and incorrect when made;

(d) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in **Section 8.02** , **8.03** (with respect to Borrower's existence), **8.11** , **8.12** , **8.14** , **8.15** , **9** or **10** ;

(e) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in **Section 11.01(a)** , **(b)** or **(d)** ) or any other Loan Document, and, in the case of any failure that is capable of cure, if such failure shall continue unremedied for a period of 30 or more days after the earlier of (i) written notice thereof from Administrative Agent is received by Borrower or (ii) a Responsible Officer of Borrower has Knowledge of or reasonably should have known of such failure;

(f) Borrower or any of its Subsidiaries shall fail to make any payment (whether of principal or interest and regardless of amount) 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;

(g) (i) any material breach of, or "event of default" or similar event by any Obligor under, any Material Agreement which would give the counterparty to such Material Agreement the right to terminate such Material Agreement pursuant to the terms thereof, provided in the case of any Material Agreement solely for the supply or manufacture of tangible products, such Material Agreement has been terminated as a result of such breach, event of default or similar event and the Obligors shall not have entered into one or more new supply or manufacturing agreements that replace the supply or the manufacturing provided under the terminated agreement on terms no less favorable to the Obligors than the terminated agreement prior to, or within [***] days of, the termination of such agreement, (ii) any material breach of, or "event of default" or similar event under, the documentation governing any Material Indebtedness shall occur, or (iii) 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 11.01(g)** shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Material Indebtedness.

(h) Borrower or any Obligor with assets (at fair market value) constituting more than [***] percent ([***]%) of the asset value of Borrower and its Subsidiaries on a consolidated basis:

(i) becomes insolvent, 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;

(ii) commits an act of bankruptcy or makes an assignment of its property for the general benefit of its creditors or makes a proposal (or files a notice of its intention to do so);

(iii) institutes any proceeding seeking to adjudicate it an insolvent, or seeking liquidation, dissolution, winding-up, reorganization, compromise, arrangement, adjustment, protection, moratorium, relief, stay of proceedings of creditors generally (or

any class of creditors), or composition of it or its debts or any other relief, under any federal, provincial or foreign Law now or hereafter in effect relating to bankruptcy, winding-up, insolvency, reorganization, receivership, plans of arrangement or relief or protection of debtors or at common law or in equity, or files an answer admitting the material allegations of a petition filed against it in any such proceeding;

(iv) applies for the appointment of, or the taking of possession by, a receiver, interim receiver, receiver/manager, sequestrator, conservator, custodian, administrator, trustee, liquidator, voluntary administrator, receiver and manager or other similar official for it or any substantial part of its property; or

(v) takes any action, corporate or otherwise, to approve, effect, consent to or authorize any of the actions described in this **Section 11.01(h)** or **(i)** , or otherwise acts in furtherance thereof or fails to act in a timely and appropriate manner in defense thereof;

(i) any petition is filed, application made or other proceeding instituted against or in respect of Borrower or any Obligor with assets (at fair market value) constituting more than [***] percent ([***]%) of the asset value of Borrower and its Subsidiaries on a consolidated basis:

(i) seeking to adjudicate it an insolvent;

(ii) seeking a receiving order against it;

(iii) seeking liquidation, dissolution, winding-up, reorganization, compromise, arrangement, adjustment, protection, moratorium, relief, stay of proceedings of creditors generally (or any class of creditors), deed of company arrangement or composition of it or its debts or any other relief under any federal, provincial or foreign law now or hereafter in effect relating to bankruptcy, winding-up, insolvency, reorganization, receivership, plans of arrangement or relief or protection of debtors or at common law or in equity; or

(iv) seeking the entry of an order for relief or the appointment of, or the taking of possession by, a receiver, interim receiver, receiver/manager, sequestrator, conservator, custodian, administrator, trustee, liquidator, voluntary administrator, receiver and manager or other similar official for it or any substantial part of its property, and,

in each of the cases of clauses (i) through (iv), such petition, application or proceeding continues undismissed, or unstayed and in effect, for a period of [***] days after the institution thereof; *provided* that if an order, decree or judgment is granted or entered (whether or not entered or subject to appeal) against Borrower or such Subsidiary thereunder in the interim, such grace period will cease to apply; *provided further* that if Borrower or such Subsidiary files an answer admitting the material allegations of a petition filed against it in any such proceeding, such grace period will cease to apply;

(j) any other event occurs which, under the laws of any applicable jurisdiction, has an effect equivalent to any of the events referred to in either of **Section 11.01(h)** or **(i)** ;

(k) one or more judgments for the payment of money in an aggregate amount in excess of $[***] (or the Equivalent Amount in other currencies) which is not covered by insurance shall be rendered against any Obligor or any combination thereof and the same shall remain undischarged for a period of [***] 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;

(l) (i) an ERISA Event shall have occurred that, in the reasonable opinion of the Lenders, when taken together with all other ERISA Events that have occurred, could reasonably be expected to result in liability of Borrower and its Subsidiaries in an aggregate amount exceeding (i) $[***] in any year or (ii) $[***] for all periods until repayment of all Obligations;

(m) a Change of Control shall have occurred (except to the extent the Loans are prepaid by Borrower pursuant to and in accordance with **Section 3.03(a)** or **(b)(ii)** prior to or concurrently with (and in any case on the same Business Day as) such Change of Control );

(n) a Material Adverse Change shall have occurred;



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(o) (i) any Lien created by any of the Security Documents over Collateral that individually or in the aggregate exceeds $[***] in market value shall at any time not constitute a valid and perfected Lien on the applicable Collateral (to the extent perfection is required herein or therein) in favor of Administrative Agent, free and clear of all other Liens (other than Permitted Liens), except as a result of the action or inaction of any Lender, (ii) except for expiration in accordance with its terms, any of the Security Documents or any Guarantee of any of the Obligations (including that contained in **Section 14** ) 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 (including that contained in **Section 14** ), or the enforceability thereof, shall be repudiated or contested by any Obligor; and

(p) any injunction, whether temporary or permanent, shall be rendered against any Obligor that prevents the Obligors from selling or manufacturing the Product or its commercially available successors, or any of their other material and commercially available products in the United States for more than [***] consecutive calendar days;

**11.02 Remedies** . (a) Upon the occurrence and during the continuation of any Event of Default, then, and in every such event (other than an Event of Default described in **Section 11.01(h)** , **(i)** or **(j)** ), 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 (including the fees specified in the Fee Letter), 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 11.01(h)** , **(i)** or **(j)** , the Commitments shall automatically terminate and the principal of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations (including fees specified in the Fee Letter), 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) **Prepayment Premium and Redemption Price** . (i) For the avoidance of doubt, the Prepayment Premium (as a component of the Redemption Price) shall be due and payable whenever so stated in this Agreement, or by any applicable operation of law, regardless of the circumstances causing any related acceleration or payment prior to the Stated Maturity Date, including without limitation any Event of Default or other failure to comply with the terms of this Agreement, whether or not notice thereof has been given, or any acceleration by, through or on account of any bankruptcy filing.

(ii) For the avoidance of doubt, the Prepayment Premium (as a component of the Redemption Price) and the fees specified in the Fee Letter that are payable upon the repayment of the Loans 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 11.02(a)** , or automatically, in accordance with **Section 11.02(b)** ), by operation of law or otherwise (including, without limitation, where bankruptcy filings or the exercise of any bankruptcy right or power, whether in any plan of reorganization or otherwise, results or would result in a payment, discharge, modification or other treatment of the Loans or Loan Documents that would otherwise evade, avoid, or otherwise disappoint the expectations of Lenders in receiving the full benefit of their bargained-for Prepayment Premium or Redemption Price as provided herein). The Obligors and Lenders acknowledge and agree that any Prepayment Premium and the fees specified in the Fee Letter 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, but instead is reasonably calculated to ensure that the Lenders receive the benefit of their bargain under the terms of this Agreement.

(iii) Each Obligor acknowledges and agrees that the Lenders shall be entitled to recover the full amount of the Redemption Price and the fees specified in the Fee Letter in each and every circumstance such amount is due pursuant to or in connection with this Agreement and the Fee Letter, including without limitation in the case of any Obligor's bankruptcy filing, so that the Lenders shall receive the benefit of their bargain hereunder and otherwise receive full recovery as agreed under every possible circumstance, and Borrower hereby waives any defense to payment, whether such defense may be based in public policy, ambiguity, or otherwise. Each Obligor further acknowledges and agrees, and waives any argument to the contrary, that payment of such amounts does not constitute a penalty or an otherwise unenforceable or invalid obligation. Any damages that the Lenders may suffer or incur resulting from or arising in connection with any breach hereof or thereof by Borrower shall constitute secured obligations owing to the Lenders.

**SECTION 12**
**ADMINISTRATIVE AGENT**

**12.01** **Appointment and Duties** . (a) **Appointment of Administrative Agent** . Each Lender hereby irrevocably appoints CRG Servicing (together with any successor Administrative Agent pursuant to **Section 12.09** ) as Administrative Agent hereunder and authorizes Administrative Agent to (i) execute and deliver the Loan Documents and accept delivery thereof on its behalf from any Obligor or any of its Subsidiaries, (ii) take such action on its behalf and to exercise all rights, powers and remedies and perform the duties as are expressly delegated to Administrative Agent under such Loan Documents, (iii) act as agent of such Lender for purposes of acquiring, holding, enforcing and perfecting all Liens granted by the Obligors on the Collateral to secure any of the Obligations and (iv) exercise such powers as are reasonably incidental thereto.

(b) **Duties as Collateral and Disbursing Agent** . Without limiting the generality of **Section 12.01(a)** , Administrative Agent shall have the sole and exclusive right and authority (to the exclusion of the Lenders), and is hereby authorized, to (i) act as the disbursing and collecting agent for the Lenders with respect to all payments and collections arising in connection with the Loan Documents (including in any proceeding described in **Section 11.01(h)** , **(i)** or **(j)** or any other bankruptcy, insolvency or similar proceeding), and each Person making any payment in connection with any Loan Document to any Secured Party is hereby authorized to make such payment to Administrative Agent, (ii) file and prove claims and file other documents necessary or desirable to allow the claims of the Secured Parties with respect to any Obligation in any proceeding described in **Section 11.01(h)** , **(i)** or **(j)** or any other bankruptcy, insolvency or similar proceeding (but not to vote, consent or otherwise act on behalf of such Secured Party), (iii) act as collateral agent for each Secured Party for purposes of acquiring, holding, enforcing and perfecting all Liens created by the Loan Documents and all other purposes stated therein, (iv) manage, supervise and otherwise deal with the Collateral, (v) take such other action as is necessary or desirable to maintain the perfection and priority of the Liens created or purported to be created by the Loan Documents, (vi) except as may be otherwise specified in any Loan Document, exercise all remedies given to Administrative Agent and the other Secured Parties with respect to the Collateral, whether under the Loan Documents, applicable Requirements of Law or otherwise, (vii) enter into subordination agreements with respect to Permitted Cure Debt, intercreditor agreements with respect to Permitted Priority Debt or any other subordination agreement or intercreditor agreement with respect to Indebtedness of an Obligor, (viii) enter into non-disturbance agreements and similar agreements and (ix) execute any amendment, consent or waiver under the Loan Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver; *provided, however,* that Administrative Agent hereby appoints, authorizes and directs each Lender to act as collateral sub-agent for Administrative Agent and the Secured Parties for purposes of the perfection of all Liens with respect to the Collateral, including any deposit account maintained by an Obligor with, and cash and Permitted Cash Equivalent Investments held by, such Lender, and may further authorize and direct any Lender to take further actions as collateral sub-agents for purposes of enforcing such Liens or otherwise to transfer the Collateral subject thereto to Administrative Agent, and each Lender hereby agrees to take such further actions to the extent, and only to the extent, so authorized and directed.

(c) **Limited Duties** . Under the Loan Documents, Administrative Agent (i) is acting solely on behalf of the Lenders (except to the limited extent provided in **Section 12.11** ), with duties that are entirely administrative in nature, notwithstanding the use of the defined term "Administrative Agent", the terms "agent", "administrative agent" and "collateral agent" and similar terms in any Loan Document to refer to Administrative Agent, which terms are used for title purposes only, (ii) is not assuming any obligation under any Loan Document other than as expressly set forth therein or any role as agent, fiduciary or trustee of or for any Lender or any other Secured Party and (iii) shall have no implied functions, responsibilities, duties, obligations or other liabilities under any Loan Document, and each Lender hereby waives and agrees not to assert any claim against Administrative Agent based on the roles, duties and legal relationships expressly disclaimed in the foregoing **clauses (i)** through **(iii)** .

**12.02** **Binding Effect** . Each Lender agrees that (i) any action taken by Administrative Agent or the Majority Lenders (or, if expressly required hereby, a greater proportion of the Lenders) in accordance with the provisions of the Loan Documents, (ii) any action taken by Administrative Agent in reliance upon the instructions of the Majority Lenders (or, where so required, such greater proportion) and (iii) the exercise by Administrative Agent or the Majority Lenders (or, where so required, such greater proportion) of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, shall be authorized and binding upon all of the Secured Parties.

**12.03** **Use of Discretion** . (a) **No Action without Instructions** . Administrative Agent shall not be required to exercise any discretion or take, or to omit to take, any action, including with respect to enforcement or collection, except any action it is required to take or omit to take (i) under any Loan Document or (ii) pursuant to instructions from the Majority Lenders (or, where expressly required by the terms of this Agreement, a greater proportion of the Lenders).

(b) **Right Not to Follow Certain Instructions** . Notwithstanding **Section 12.03(a)** , Administrative Agent shall not be required to take, or to omit to take, any action (i) unless, upon demand, Administrative Agent receives an indemnification satisfactory to it from the Lenders (or, to the extent applicable and acceptable to Administrative Agent, any other Secured Party) against all liabilities that, by reason of such action or omission, may be imposed on, incurred by or asserted against Administrative Agent or any Related Person thereof or (ii) that is, in the opinion of Administrative Agent or its counsel, contrary to any Loan Document or applicable Requirement of Law.

**12.04** **Delegation of Rights and Duties** . Administrative Agent may, upon any term or condition it specifies, delegate or exercise any of its rights, powers and remedies under, and delegate or perform any of its duties or any other action with respect to, any Loan Document by or through or to any trustee, co-agent, sub-agent, employee, attorney-in-fact and any other Person (including any other Secured Party). Any such Person shall benefit from this **Section 12** to the extent provided by Administrative Agent. Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agent except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agent.

**12.05** **Reliance and Liability** . (a) Administrative Agent may, without incurring any liability hereunder, (i) consult with any of its Related Persons and, whether or not selected by it, any other advisors, accountants and other experts (including advisors to, and accountants and experts engaged by, any Obligor) and (ii) rely and act upon any document and information and any telephone message or conversation, in each case believed by it to be genuine and transmitted, signed or otherwise authenticated by the appropriate parties hereto.

(b) None of Administrative Agent and its Related Persons shall be liable for any action taken or omitted to be taken by any of them under or in connection with any Loan Document, and each Lender and each Obligor hereby waives and shall not assert any right, claim or cause of action based thereon, except to the extent of liabilities resulting primarily from the gross negligence or willful misconduct of Administrative Agent or, as the case may be, such Related Person (each as determined in a final, non-appealable judgment by a court of competent jurisdiction) in connection with the duties expressly set forth herein. Without limiting the foregoing, Administrative Agent:

(i) shall not be responsible or otherwise incur liability for any action or omission taken in reliance upon the instructions of the Majority Lenders or for the actions or omissions of any of its Related Persons selected with reasonable care (other than employees, officers and directors of Administrative Agent, when acting on behalf of Administrative Agent);

(ii) shall not be responsible to any Secured Party for the due execution, legality, validity, enforceability, effectiveness, genuineness, sufficiency or value of, or the attachment, perfection or priority of any Lien created or purported to be created under or in connection with, any Loan Document;

(iii) makes no warranty or representation, and shall not be responsible, to any Secured Party for any statement, document, information, representation or warranty made or furnished by or on behalf of any Related Person, in or in connection with any Loan Document or any transaction contemplated therein, whether or not transmitted by Administrative Agent, including as to completeness, accuracy, scope or adequacy thereof, or for the scope, nature or results of any due diligence performed by Administrative Agent in connection with the Loan Documents; and

(iv) shall not have any duty to ascertain or to inquire as to the performance or observance of any provision of any Loan Document, whether any condition set forth in any Loan Document is satisfied or waived, as to the financial condition of any Obligor or as to the existence or continuation or possible occurrence or continuation of any Default or Event of Default and shall not be deemed to have notice or knowledge of such occurrence or continuation unless it has received a notice from Borrower or any Lender describing such Default or Event of Default clearly labeled “notice of default” (in which case Administrative Agent shall promptly give notice of such receipt to all Lenders);

and, for each of the items set forth in **clauses (i) through (iv)** above, each Lender and each Obligor hereby waives and agrees not to assert any right, claim or cause of action it might have against Administrative Agent based thereon.

**12.06** **Administrative Agent Individually** . Administrative Agent and its Affiliates may make loans and other extensions of credit to, acquire Equity Interests of, engage in any kind of business with, any Obligor or Affiliate thereof as though it were not acting Administrative Agent and may receive separate fees and other payments therefor. To the extent Administrative Agent or any of its Affiliates makes any Loan or otherwise becomes a Lender hereunder, it shall have and may exercise the same rights and powers hereunder and shall be subject to the same obligations and liabilities as any other Lender and the terms "Lender", "Majority Lender", and any similar terms shall, except where otherwise expressly provided in any Loan Document, include, without limitation, Administrative Agent or such Affiliate, as the case may be, in its individual capacity as Lender or as one of the Majority Lenders, respectively.

**12.07** **Lender Credit Decision** . Each Lender acknowledges that it shall, independently and without reliance upon Administrative Agent, any Lender or any of their Related Persons or upon any document solely or in part because such document was transmitted by Administrative Agent or any of its Related Persons, conduct its own independent investigation of the financial condition and affairs of each Obligor and make and continue to make its own credit decisions in connection with entering into, and taking or not taking any action under, any Loan Document or with respect to any transaction contemplated in any Loan Document, in each case based on such documents and information as it shall deem appropriate.

**12.08** **Expenses; Indemnities** . (a) Each Lender agrees to reimburse Administrative Agent and each of its Related Persons (to the extent not reimbursed by any Obligor) promptly upon demand for such Lender's Proportionate Share of any costs and expenses (including fees, charges and disbursements of financial, legal and other advisors and Other Taxes paid in the name of, or on behalf of, any Obligor) that may be incurred by Administrative Agent or any of its Related Persons in connection with the preparation, syndication, execution, delivery, administration, modification, consent, waiver or enforcement (whether through negotiations, through any work-out, bankruptcy, restructuring or other legal or other proceeding or otherwise) of, or legal advice in respect of its rights or responsibilities under, any Loan Document.

(b) Each Lender further agrees to indemnify Administrative Agent and each of its Related Persons (to the extent not reimbursed by any Obligor), from and against such Lender's aggregate Proportionate Share of the liabilities (including Taxes, interests and penalties imposed for not properly withholding or backup withholding on payments made to on or for the account of any Lender) that may be imposed on, incurred by or asserted against Administrative Agent or any of its Related Persons in any matter relating to or arising out of, in connection with or as a result of any Loan Document, any Related Document or any other act, event or transaction related, contemplated in or attendant to any such document, or, in each case, any action taken or omitted to be taken by Administrative Agent or any of its Related Persons under or with respect to any of the foregoing; *provided, however,* that no Lender shall be liable to Administrative Agent or any of its Related Persons to the extent such liability is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from such Administrative Agent's or such Related Person's gross negligence or willful misconduct.

**12.09** **Resignation of Administrative Agent** . (a) Administrative Agent may resign at any time by delivering notice of such resignation to the Lenders and Borrower, effective on the date set forth in such notice or, if not such date is set forth therein, upon the date such notice shall be effective. If Administrative Agent delivers any such notice, the Majority Lenders shall have the right to appoint a successor Administrative Agent. If, within 30 days after the retiring Administrative Agent having given notice of resignation, no successor Administrative Agent has been appointed by the Majority Lenders that has accepted such appointment, then the retiring Administrative Agent may, on behalf of the Lenders, appoint a successor Administrative Agent from among the Lenders. Each appointment under this **Section 12.09(a)** shall be subject to the prior consent of Borrower, which may not be unreasonably withheld but shall not be required during the continuance of an Event of Default.

(b) Effective immediately upon its resignation, (i) the retiring Administrative Agent shall be discharged from its duties and obligations under the Loan Documents, (ii) the Lenders shall assume and perform all of the duties of Administrative Agent until a successor Administrative Agent shall have accepted a valid appointment hereunder, (iii) the retiring Administrative Agent and its Related Persons shall no longer have the benefit of any provision of any Loan Document other than with respect to any actions taken or omitted to be taken while such retiring Administrative Agent was, or because such Administrative Agent had been, validly acting as Administrative Agent under the Loan Documents and (iv) subject to its rights under **Section 12.03** , the retiring Administrative Agent shall take such action as may be reasonably necessary to assign to the successor Administrative Agent its rights as Administrative Agent under the Loan Documents. Effective immediately upon its acceptance of a valid appointment as Administrative Agent, a successor Administrative Agent shall succeed to, and become vested with, all the rights, powers, privileges and duties of the retiring Administrative Agent under the Loan Documents.

**12.10** **Release of Collateral or Guarantors** . Each Lender hereby consents to the release and hereby directs Administrative Agent to release (or, in the case of **Section 12.10(b)(ii)** , release or subordinate) the following:

(a) any Subsidiary of Borrower from its guaranty of any Obligation of any Obligor if all of the Equity Interests in such Subsidiary owned by any Obligor or any of its Subsidiaries are disposed of in an Asset Sale permitted under the Loan Documents (including pursuant to a waiver or consent), to the extent that, after giving effect to such Asset Sale, such Subsidiary would not be required to guaranty any Obligations pursuant to **Section 8.12** ; and

(b) any Lien held by Administrative Agent for the benefit of the Secured Parties against (i) any Collateral that is disposed of by an Obligor in an Asset Sale permitted by the Loan Documents (including pursuant to a valid waiver or consent), to the extent all Liens required to be granted in any Collateral pursuant to **Section 8.12** after giving effect to such Asset Sale have been granted, (ii) any property subject to a Lien described in **Section 9.02(d)** and (iii) all of the Collateral and all Obligors, upon (A) termination of the Commitments, (B) payment and satisfaction in full of all Loans and all other Obligations that Administrative Agent has been notified in writing are then due and payable, (C) deposit of cash collateral with respect to all contingent Obligations, in amounts and on terms and conditions and with parties satisfactory to the Majority Lenders and each Indemnitee that is owed such Obligations and (D) to the extent requested by Administrative Agent, receipt by the Secured Parties of liability releases from the Obligors each in form and substance acceptable to Administrative Agent.

Each Lender hereby directs Administrative Agent, and Administrative Agent hereby agrees, upon receipt of reasonable advance notice from Borrower, to execute and deliver or file such documents and to perform other actions reasonably necessary to release the guaranties and Liens when and as directed in this **Section 12.10** .

**12.11** **Additional Secured Parties** . The benefit of the provisions of the Loan Documents directly relating to the Collateral or any Lien granted thereunder shall extend to and be available to any Secured Party that is not a Lender as long as, by accepting such benefits, such Secured Party agrees, as among Administrative Agent and all other Secured Parties, that such Secured Party is bound by (and, if requested by Administrative Agent, shall confirm such agreement in a writing in form and substance acceptable to Administrative Agent) this **Section 12** and the decisions and actions of Administrative Agent and the Majority Lenders (or, where expressly required by the terms of this Agreement, a greater proportion of the Lenders) to the same extent a Lender is bound; *provided* , *however* , that, notwithstanding the foregoing, (a) such Secured Party shall be bound by **Section 12.08** only to the extent of liabilities, costs and expenses with respect to or otherwise relating to the Collateral held for the benefit of such Secured Party, in which case the obligations of such Secured Party thereunder shall not be limited by any concept of Proportionate Share or similar concept, (b) each of Administrative Agent and each Lender shall be entitled to act at its sole discretion, without regard to the interest of such Secured Party, regardless of whether any Obligation to such Secured Party thereafter remains outstanding, is deprived of the benefit of the Collateral, becomes unsecured or is otherwise affected or put in jeopardy thereby, and without any duty or liability to such Secured Party or any such Obligation and (c) such Secured Party shall not have any right to be notified of, consent to, direct, require or be heard with respect to, any action taken or omitted in respect of the Collateral or under any Loan Document.

## SECTION 13
## MISCELLANEOUS

**13.01** **No Waiver** . No failure on the part of Administrative Agent or any Lender 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.

**13.02** **Notices** . All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, this Agreement) shall be given or made in writing (including by telecopy or electronic email) delivered, if to Borrower, another Obligor, Administrative Agent or any Lender, to its address specified on the signature pages 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. All such communications provided for herein by telecopy or electronic email shall be confirmed in writing promptly after the delivery of such communication (it being understood that non-receipt of written confirmation of such communication shall not invalidate such communication).

**13.03 Expenses, Indemnification, Etc** .

(a) **Expenses** . Borrower agrees to pay or reimburse (i) Administrative Agent and the Lenders for all of their reasonable out of pocket costs and expenses (including the reasonable fees and expenses of Cooley LLP, special counsel to Administrative Agent and the Lenders, and any sales, goods and services or other similar Taxes applicable thereto, and printing, reproduction, document delivery, communication and travel costs) 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), (y) post-closing costs and (z) the negotiation or preparation of any 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) Administrative Agent and the Lenders for all of their out of pocket costs and expenses (including the fees and expenses of legal counsel) in connection with any enforcement or collection proceedings resulting from the occurrence of an Event of Default; *provided, however,* that Borrower shall not be required to pay or reimburse any amounts pursuant to **Section 13.03(a)(i)(x)** in excess of the Expense Cap.

(b) **Indemnification** . Borrower hereby indemnifies Administrative Agent, each Lender, their respective Affiliates, and their respective directors, officers, employees, attorneys, agents, advisors and controlling parties (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 may be incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to this Agreement or any of the other Loan Documents or the transactions contemplated hereby or thereby or any use made or proposed to be made with the proceeds of the Loans, and any claim, investigation, litigation or proceeding or the preparation of any defense with respect thereto arising out of or in connection with or relating to any of the foregoing, whether or not any Indemnified Party is a party to an actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based in contract, tort or any other theory, and whether or not such investigation, litigation or proceeding is brought by Borrower, any of its shareholders or creditors, and whether or not the conditions precedent set forth in **Section 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 such 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 contemplated hereby or thereby or the actual or proposed use of the proceeds of the Loans. Borrower, its Subsidiaries and Affiliates and their respective directors, officers, employees, attorneys, agents, advisors and controlling parties are each sometimes referred to in this Agreement as a " ***Borrower Party*** ." No Lender shall assert any claim against any Borrower 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 contemplated hereby or thereby or the actual or proposed use of the proceeds of the Loans. This Section 13.03 shall not apply with respect to Taxes other than Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

**13.04 Amendments, Etc** . Except as otherwise expressly provided in this Agreement, any provision of this Agreement may be modified or supplemented only by an instrument in writing signed by Borrower and the Majority Lenders (or Administrative Agent on behalf of such Majority Lenders); *provided however,* that:

(a) the consent of all of the Lenders shall be required to:

(i) amend, modify, discharge, terminate or waive any of the terms of this Agreement if such amendment, modification, discharge, termination or waiver would increase the amount of the Loans, reduce the fees payable hereunder, reduce interest rates or other amounts payable with respect to the Loans, extend any date fixed for payment of principal, interest or other amounts payable relating to the Loans or extend the repayment dates of the Loans;

(ii) amend the provisions of **Section 6** ;

(iii) amend, modify, discharge, terminate or waive any Security Document if the effect is to release a material part of the Collateral subject thereto other than pursuant to the terms hereof or thereof; or

(iv) amend this **Section 13.04** ; and

(b) no amendment, waiver or consent shall affect the rights or duties under any Loan Document of, or any payment to, Administrative Agent (or otherwise modify any provision of **Section 12** or the application thereof) unless in writing and signed by Administrative Agent in addition to any signature otherwise required.

Notwithstanding anything to the contrary herein, a Defaulting Lender shall not have any right to approve or disapprove any amendment, waiver or consent hereunder (and any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender may be effected with the consent of the applicable Lenders other than Defaulting Lenders), except that (x) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender and (y) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that by its terms affects any Defaulting Lender more adversely than other affected Lenders shall require the consent of such Defaulting Lender.

**13.05 Successors and Assigns** .

(a) **General** . The provisions of this Agreement and the other Loan Documents shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that Borrower may not assign or otherwise transfer any of its rights or obligations hereunder or under any of the other Loan Documents without the prior written consent of the Majority Lenders. Any of the Lenders may assign or otherwise transfer any of their rights or obligations hereunder or under any of the other Loan Documents to an assignee (i) in accordance with the provisions of **Section 13.05(b)** , (ii) by way of participation in accordance with the provisions of **Section 13.05(e)** or (iii) by way of pledge or assignment of a security interest subject to the restrictions of **Section 13.05(g)** . 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 **Section 13.05(e)** and, to the extent expressly contemplated hereby, the Indemnified Parties) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) **Assignments by Lenders** . Any of the Lenders may at any time assign to one or more Eligible Transferees (or, if an Event of Default has occurred and is continuing, to any Person) all or a portion of their rights and obligations under this Agreement (including all or a portion of the Commitment and the Loans at the time owing to it); *provided* , *however* , that no such assignment shall be made to Borrower, an Affiliate of Borrower, or any employees or directors of Borrower or, unless an Event of Default has occurred and is continuing, any other Person that is not an Eligible Transferee (which restriction shall not apply to (A) an assignment by a Lender in connection with (x) assignments by such Lender due to a forced divestiture at the request of any regulatory agency; or (y) upon the occurrence of a default, event of default or similar occurrence with respect to such Lender's own financing or securitization transactions, or (B) a pledge of assets by a Lender in connection with such Lender's own financing or securitization transactions). Subject to the recording thereof by Administrative Agent pursuant to **Section 13.05(d)** , from and after the effective date specified in each Assignment and Assumption, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of the Lenders under this Agreement and the other Loan Documents, and correspondingly the assigning Lender shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of a Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) and the other Loan Documents but shall continue to be entitled to the benefits of **Section 5** and **Section 13.03** . Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this **Section 13.05(b)** shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with **Section 13.05(e)** .

(c) **Amendments to Loan Documents** . Each of Administrative Agent, 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 Administrative Agent, the Lenders and the Obligors, as shall reasonably be necessary to implement and give effect to any assignment made under this **Section 13.05** .

(d) **Register** . Administrative Agent, acting solely for this purpose as an agent of Borrower, shall maintain at one of its offices a register for the recordation of the name and address of any assignee of the Lenders and the Commitment and outstanding principal amount (and stated interest) of the Loans owing thereto (the " ***Register*** "). The entries in the Register shall be conclusive, absent manifest error, and Borrower shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as the "Lender" hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by Borrower, at any reasonable time and from time to time upon reasonable prior notice. This **Section 13.05** shall be construed so that the Obligations are at all times maintained in "registered form" within the meaning of Section 871(h)(2) and 881(c)(2) of the Code.

(e) **Participations** . Any of the Lenders may at any time, without the consent of, or notice to, Borrower, sell participations to any Person (other than a natural person or Borrower or any of Borrower's Affiliates or Subsidiaries or any party that is not an Eligible Assignee) (each, a " ***Participant*** ") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of the Commitment and/or the Loans owing to it); *provided* that (i) such Lender's obligations

under this Agreement 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 the Lenders in connection therewith.

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. Subject to **Section 13.05(f)** , Borrower agrees that each Participant shall be entitled to the benefits of **Section 5** (subject to the requirements and limitations therein, including the requirements under Section 5.03(e) (it being understood that the documentation required by Section 5.03(e) shall be delivered to 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(b)** . To the extent permitted by law, each Participant also shall be entitled to the benefits of **Section 4.04(a)** as though it were the Lender.

(f) **Limitations on Rights of Participants** . A Participant shall not be entitled to receive any greater payment under **Section 5.01** or **5.03** than a Lender would have been entitled to receive with respect to the participation sold to such Participant. 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, letter 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, letters of credit or its 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. For the avoidance of doubt, Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(g) **Certain Pledges** . 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; *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.

**13.06** **Survival** . The obligations of the Obligors under **Sections 5.01** , **5.02** , **5.03** , **13.03** , **13.05** , **13.09** , **13.10** , **13.11** , **13.12** , **13.13** , **13.14** , **13.20** and **Section 14** (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 Commitment and, in the case of the Lenders' assignment of any interest in the Commitment 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 the Lenders may cease to be "Lenders" hereunder. In addition, each representation and warranty made, or deemed to be made by a Notice of Borrowing, herein or pursuant hereto shall survive the making of such representation and warranty.

**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.

**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.

**13.09** **Governing Law** . This Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; *provided* that Section 5-1401 of the New York General Obligations Law shall apply.

**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 may be brought initially in the federal or state courts in Houston, Texas or in the courts of its own corporate domicile and irrevocably submits to the non-exclusive jurisdiction of each such court for the purpose of any such suit, action, proceeding or judgment. This **Section 13.10(a)** is for the benefit of Administrative Agent and the Lenders only and, as a result, neither Administrative Agent nor any Lender shall be prevented from taking proceedings in any other courts with jurisdiction. To the extent allowed by applicable Laws, Administrative Agent and the Lenders may take concurrent proceedings in any number of jurisdictions.

(b) **Alternative Process** . Nothing herein shall in any way be deemed to limit the ability of Administrative Agent or 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.

**13.11 Waiver of Jury Trial** . EACH OBLIGOR AND EACH LENDER 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.

**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.

**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 ADMINISTRATIVE AGENT OR THE LENDERS OTHER THAN THOSE EXPRESSLY SET FORTH IN THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

**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.

**13.15 No Fiduciary Relationship** . Each Obligor acknowledges that Administrative Agent and the Lenders have no fiduciary relationship with, or fiduciary duty to, Borrower arising out of or in connection with this Agreement or the other Loan Documents, and the relationship between the Lenders and Borrower is solely that of creditor and debtor. This Agreement and the other Loan Documents do not create a joint venture among the parties.

**13.16 Confidentiality** . Administrative Agent and the Lenders agree to maintain the confidentiality of the Confidential Information (as defined in the Non-Disclosure Agreement (defined below)) in accordance with the terms of that certain confidentiality agreement dated September 7, 2016, between Borrower and CR Group (the " ***Non-Disclosure Agreement*** "). Any new Lender that becomes party to this Agreement hereby agrees to be bound by the terms of the Non-Disclosure Agreement. The parties to this Agreement shall prepare a mutually agreeable press release announcing the completion of this transaction on the first Borrowing Date.

**13.17** **USA PATRIOT Act** . 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*** ") or any Anti-Money Laundering Laws, they are required to obtain, verify and record information that identifies such Obligor, which information includes the name and address of such Obligor and other information that will allow such Lender to identify such Obligor in accordance with the Act or other Anti-Money Laundering Laws.

**13.18** **Maximum Rate of Interest** . Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable Law (in each case, the " ***Maximum Rate*** "). If the Lenders shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans, and not to the payment of interest, or, if the excessive interest exceeds such unpaid principal, the amount exceeding the unpaid balance shall be refunded to the applicable Obligor. In determining whether the interest contracted for, charged, or received by the Lenders exceeds the Maximum Rate, the Lenders may, to the extent permitted by applicable Law, (a) characterize any payment that is not principal as an expense, fee, or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, (c) amortize, prorate, allocate, and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Indebtedness and other obligations of any Obligor hereunder, or (d) allocate interest between portions of such Indebtedness and other obligations under the Loan Documents to the end that no such portion shall bear interest at a rate greater than that permitted by applicable Law.

**13.19** **Certain Waivers** .

(a) **Real Property Security Waivers** .

(i) Each Obligor acknowledges that all or any portion of the Obligations may now or hereafter be secured by a Lien or Liens upon real property evidenced by certain documents including, without limitation, deeds of trust and assignments of rents. The Secured Parties may, pursuant to the terms of said real property security documents and applicable law, foreclose under all or any portion of one or more of said Liens by means of judicial or nonjudicial sale or sales. Each Obligor agrees that the Secured Parties may exercise whatever rights and remedies they may have with respect to said real property security, all without affecting the liability of any Obligor under the Loan Documents, except to the extent the Secured Parties realize payment by such action or proceeding. No election to proceed in one form of action or against any party, or on any obligation shall constitute a waiver of any Secured Party's rights to proceed in any other form of action or against any Obligor or any other Person, or diminish the liability of any Obligor, or affect the right of the Secured Parties to proceed against any Obligor for any deficiency, except to the extent the Secured Parties realize payment by such action, notwithstanding the effect of such action upon any Obligor's rights of subrogation, reimbursement or indemnity, if any, against Obligor or any other Person.

(ii) To the extent permitted under applicable law, each Obligor hereby waives any rights and defenses that are or may become available to such Obligor by reason of Sections 2787 to 2855, inclusive, of the California Civil Code.

(iii) To the extent permitted under applicable law, each Obligor hereby waives all rights and defenses that such Obligor may have because the Obligations are or may be secured by real property. This means, among other things:

(A) the Secured Parties may collect from any Obligor without first foreclosing on any real or personal property collateral pledged by any other Obligor;

(B) If the Secured Parties foreclose on any real property collateral pledged by any Obligor:

(1) The amount of the Loans may be reduced only by the price for which that collateral is sold at the foreclosure sale, even if the collateral is worth more than the sale price; and

(2) the Secured Parties may collect from each Obligor even if the Secured Parties, by foreclosing on the real property collateral, have destroyed any right that such Obligor may have to collect from any other Obligor.

(3) To the extent permitted under applicable law, this is an unconditional and irrevocable waiver of any rights and defenses each Obligor may have because the Obligations are or may be secured by real property. These rights and defenses include, but are not limited to, any rights or defenses based upon Section 580a, 580b, 580d or 726 of the California Code of Civil Procedure.

(iv) To the extent permitted under applicable law, each Obligor waives all rights and defenses arising out of an election of remedies by the Secured Parties, even though that election of remedies, such as a nonjudicial foreclosure with respect to security for a guaranteed obligation, has destroyed such Obligor's rights of subrogation and reimbursement against the principal by the operation of Section 580d of the California Code of Civil Procedure or otherwise.

(b) **Waiver of Marshaling** . WITHOUT LIMITING THE FOREGOING IN ANY WAY, EACH OBLIGOR HEREBY IRREVOCABLY WAIVES AND RELEASES, TO THE EXTENT PERMITTED BY LAW, ANY AND ALL RIGHTS IT MAY HAVE AT ANY TIME (WHETHER ARISING DIRECTLY OR INDIRECTLY, BY OPERATION OF LAW, CONTRACT OR OTHERWISE) TO REQUIRE THE MARSHALING OF ANY ASSETS OF ANY OBLIGOR, WHICH RIGHT OF MARSHALING MIGHT OTHERWISE ARISE FROM ANY PAYMENTS MADE OR OBLIGATIONS PERFORMED.

**13.20 Tax Treatment** . Absent a change in the applicable law requiring otherwise, the parties hereto agree (a) that no Loan shall be treated as a "contingent payment debt instrument" under Treasury Regulations Section 1.1275-4, (b) except for a Lender described in Sections 871(h)(3) or 881(c)(3) of the Code, all interest on the Loans is "portfolio interest" within the meaning of Sections 871(h), 881(c) and 1441(c)(9) of the Code, and (c) to adhere to this Section 13.20 for federal income and any other applicable tax purposes and not to take any action or file any Tax Return, report or declaration inconsistent herewith.

**13.21 Original Issue Discount** . For purposes of Sections 1272, 1273 and 1275 of the Code, each Loan is being issued with original issue discount; please contact Shawn Lynch, Chief Financial Officer, 101 Hartwell Avenue, Lexington, Massachusetts 02421, telephone: (781) 457-1200 to obtain information regarding the issue price, the amount of original issue discount and the yield to maturity.

## SECTION 14
## GUARANTEE

**14.01 The Guarantee** . The Subsidiary Guarantors hereby jointly and severally guarantee to the Secured Parties and their respective 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 and all fees and other amounts from time to time owing to the Secured Parties 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 Subsidiary 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 Subsidiary 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.

**14.02 Obligations Unconditional** . The obligations of the Subsidiary Guarantors under **Section 14.01** 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 14.02** that the obligations of the Subsidiary 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 Subsidiary Guarantors hereunder, which shall remain absolute and unconditional as described above:

(a) at any time or from time to time, without notice to the Subsidiary 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, the Secured Parties as security for any of the Guaranteed Obligations shall fail to be perfected.

The Subsidiary Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that any Secured Party 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.

**14.03 Reinstatement** . The obligations of the Subsidiary Guarantors under this **Section 14** 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 Subsidiary Guarantors jointly and severally agree that they will indemnify the Secured Parties on reasonable demand for all reasonable costs and expenses (including fees of counsel) incurred by the Lenders in connection with such rescission or restoration, including any such 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.

**14.04 Subrogation** . The Subsidiary Guarantors hereby jointly and severally agree that until the payment and satisfaction in full of all Guaranteed Obligations and the expiration and termination of the Commitments under this Agreement, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in **Section 14.01** , 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.

**14.05 Remedies** . The Subsidiary Guarantors jointly and severally agree that, as between the Subsidiary Guarantors and the Secured Parties, 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 **Section 11** (and shall be deemed to have become automatically due and payable in the circumstances provided in **Section 11** ) for purposes of **Section 14.01** 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 Subsidiary Guarantors for purposes of **Section 14.01** .

**14.06 Instrument for the Payment of Money** . Each Subsidiary Guarantor hereby acknowledges that the guarantee in this **Section 14** constitutes an instrument for the payment of money, and consents and agrees that the Secured Parties, at their sole option, in the event of a dispute by such Subsidiary 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.

**14.07 Continuing Guarantee** . The guarantee in this **Section 14** is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

**14.08 Rights of Contribution** . The Subsidiary Guarantors hereby agree, as between themselves, that if any Subsidiary Guarantor shall become an Excess Funding Guarantor (as defined below) by reason of the payment by such Subsidiary Guarantor of any Guaranteed Obligations, each other Subsidiary Guarantor shall, on reasonable demand of such Excess Funding Guarantor (but subject to the next sentence), pay to such Excess Funding Guarantor an amount equal to such Subsidiary 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 Subsidiary Guarantor to any Excess Funding Guarantor under this **Section 14.08** shall be subordinate and subject in right of payment to the prior payment in full of the obligations of such Subsidiary Guarantor under the other provisions of this **Section 14** 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 14.08** , (i) " ***Excess Funding Guarantor*** " means, in respect of any Guaranteed Obligations, a Subsidiary 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, for any Subsidiary Guarantor, the ratio (expressed as a percentage) of (x) the amount by which the aggregate present fair saleable value of all properties of such Subsidiary Guarantor (excluding any shares of stock of any other Subsidiary Guarantor) exceeds the amount of all the debts and liabilities of such Subsidiary Guarantor (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of such Subsidiary Guarantor hereunder and any obligations of any other Subsidiary Guarantor that have been Guaranteed by such Subsidiary Guarantor) to (y) the amount by which the aggregate fair saleable value of all properties of all of the Subsidiary 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 Subsidiary Guarantors hereunder and under the other Loan Documents) of all of the Subsidiary Guarantors, determined (A) with respect to any Subsidiary Guarantor that is a party hereto on the first Borrowing Date, as of such Borrowing Date, and (B) with respect to any other Subsidiary Guarantor, as of the date such Subsidiary Guarantor becomes a Subsidiary Guarantor hereunder.

**14.09 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 Subsidiary Guarantor under **Section 14.01** would otherwise, taking into account the provisions of **Section 14.08** , 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 14.01** , then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Subsidiary Guarantor, any Secured Party 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.

[Signature Pages Follow]



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

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:

**T2 BIOSYSTEMS, INC.**

By: /s/ John McDonough
Name: John McDonough
Title: Chief Executive Officer

Address for Notices:
101 Hartwell Avenue
Lexington, MA 02421
Attn: Michael Gibbs
Tel.: (781) 761-4630
Fax: (781) 538-4020
Email: mgibbs@t2biosystems.com

ADMINISTRATIVE AGENT:

**CRG SERVICING LLC**

By: /s/ Nathan Hukill
Name: Nathan Hukill
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

LENDERS:

**CRG PARTNERS III L.P.**
By CRG PARTNERS III GP L.P., its General Partner
By CRG PARTNERS III GP LLC, its General Partner

By: Nathan Hukill
Name: Nathan Hukill
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com

**CRG PARTNERS III – PARALLEL FUND "A" L.P.**
By CRG PARTNERS III – PARALLEL FUND "A" GP L.P., its General Partner
By CRG PARTNERS III – PARALLEL FUND "A" GP LLC, its General Partner

By: /s/ Nathan Hukill
Name: Nathan Hukill
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CRG PARTNERS III (CAYMAN) L.P.**
By CRG PARTNERS III (CAYMAN) GP L.P., its General Partner
By CRG PARTNERS III (CAYMAN) GP LLC, its General Partner

By: /s/ Nathan Hukill
Name: Nathan Hukill
Title: Authorized Signatory

Witness: /s/ Nicole Nesson

Name: Nicole Nesson

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com

**CRG PARTNERS III PARALLEL FUND "B" (CAYMAN) L.P.**
By CRG PARTNERS III (CAYMAN) GP L.P., its General Partner
By CRG PARTNERS III (CAYMAN) GP LLC, its General Partner

By: Nathan Hukill
Name: Nathan Hukill
Title: Authorized Signatory

Witness: /s/ Nicole Nesson

Name: Nicole Nesson

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Schedule 1**
**to Term Loan Agreement**

COMMITMENTS

| Lender | Commitment | Proportionate Share |
|---|---|---|
| CRG Partners III – Parallel Fund "A" L.P. | $ 4,250,000.00 | 8.50% |
| CRG Partners III L.P. | $ 8,650,000.00 | 17.30% |
| CRG Partners III (Cayman) L.P. | $ 18,200,000.00 | 36.40% |
| CRG Partners III Parallel Fund "B" (Cayman) L.P. | $ 18,900,000.00 | 37.80% |
| **TOTAL** | **$ 50,000,000.00** | **100%** |

WARRANT SHARES

| Lender | Number of Shares of Common Stock subject to the Warrants |
|---|---|
| CRG Partners III – Parallel Fund "A" L.P. | 44,961 |
| CRG Partners III L.P. | 91,510 |
| CRG Partners III (Cayman) L.P. | 192,541 |
| CRG Partners III Parallel Fund "B" (Cayman) L.P. | 199,946 |
| **TOTAL** | **528,958** |

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit A**
**to Term Loan Agreement**

FORM OF GUARANTEE ASSUMPTION AGREEMENT

GUARANTEE ASSUMPTION AGREEMENT dated as of [DATE] (this "***Agreement***") by [NAME OF ADDITIONAL SUBSIDIARY GUARANTOR], a _____ [corporation][limited liability company] (the "***Additional Subsidiary Guarantor***"), in favor of CRG SERVICING LLC, as administrative agent and collateral agent ("***Administrative Agent***") for the benefit of the Secured Parties under that certain Term Loan Agreement, dated as of December 30, 2016 (as amended, restated, supplemented or otherwise modified, renewed, refinanced or replaced, the "***Loan Agreement***"), among T2 Biosystems, Inc., a Delaware corporation ("***Borrower***"), Administrative Agent, the lenders from time to time party thereto and the Subsidiary Guarantors from time to time party thereto. The terms defined in the Loan Agreement are herein used as therein defined.

Pursuant to **Section 8.12(a)** of the Loan Agreement, the Additional Subsidiary Guarantor hereby agrees to become a "Subsidiary Guarantor" for all purposes of the Loan Agreement, and a "Grantor" for all purposes of the Security Agreement. Without limiting the foregoing, the Additional Subsidiary Guarantor hereby, jointly and severally with the other Subsidiary Guarantors, guarantees to the Lenders and their successors and assigns the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of all Guaranteed Obligations (as defined in **Section 14.01** of the Loan Agreement) in the same manner and to the same extent as is provided in **Section 14** of the Loan Agreement. In addition, as of the date hereof, the Additional Subsidiary Guarantor hereby makes the representations and warranties set forth in **Sections 7.01** , **7.02** , **7.03** , **7.05(a)** , **7.06** , **7.07** , **7.08** and **7.18** of the Loan Agreement, and in **Section 2** of the Security Agreement, with respect to itself and its obligations under this Agreement and the other Loan Documents, as if each reference in such Sections to the Loan Documents included reference to this Agreement, such representations and warranties to be made as of the date hereof.

The Additional Subsidiary Guarantor hereby instructs its counsel to deliver the opinions referred to in **Section 8.12(a)** of the Loan Agreement to Administrative Agent.

IN WITNESS WHEREOF, the Additional Subsidiary Guarantor has caused this Agreement to be duly executed and delivered as of the day and year first above written.

[ADDITIONAL SUBSIDIARY GUARANTOR]

By _____
Name:
Title:

**Exhibit B**
**to Term Loan Agreement**

FORM OF NOTICE OF BORROWING

Date : [_____]

To: CRG Servicing LLC and the Lenders referred to below

1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel

***Re: Borrowing under Term Loan Agreement***

Ladies and Gentlemen:

The undersigned, T2 Biosystems, Inc., a Delaware corporation (" ***Borrower*** "), refers to the Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the " ***Loan Agreement*** "), among Borrower, CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, " ***Administrative Agent*** "), and the lenders from time to time party thereto and the subsidiary guarantors from time to time party thereto. The terms defined in the Loan Agreement are herein used as therein defined.

Borrower hereby gives you notice irrevocably, pursuant to **Section 2.02** of the Loan Agreement, of the borrowing of the Loan specified herein:

1. The proposed Borrowing Date is [_____].

2. The amount of the proposed Borrowing is $[_____].

3. The payment instructions with respect to the funds to be made available to Borrower are as follows:

Bank name: [_____]
Bank Address: [_____]
Routing Number: [_____]
Account Number: [_____]
Swift Code: [_____]

Borrower hereby certifies that the following statements are true on the date hereof, and will be true on the date of the proposed borrowing of the Loan, before and after giving effect thereto and to the application of the proceeds therefrom:

a) the representations and warranties made by Borrower in **Section 7** of the Loan Agreement are true and correct in all material respects (unless qualified by materiality or Material Adverse Effect, in which case they are true and correct in all respects) on and as of the Borrowing Date and immediately after giving effect to the application of the proceeds of the Borrowing with the same force and effect as if made on and as of such date except that the representation regarding representations and warranties that refer to a specific earlier date shall be that they were true and correct in all material respects (unless qualified by materiality or Material Adverse Effect, in which case they were true and correct in all respects) on such earlier date;

b) on and as of the Borrowing Date, there shall have occurred no Material Adverse Change since [_____]; and

c) no Default has occurred and is continuing or would result from such proposed Borrowing or the application of the proceeds thereof.

IN WITNESS WHEREOF, Borrower has caused this Notice of Borrowing to be duly executed and delivered as of the day and year first above written.

BORROWER:

**T2 BIOSYSTEMS, INC.**

By _____
Name:
Title:

Exhibit B-2

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit C-1**
**to Term Loan Agreement**

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Borrower, CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Lender***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Lender hereby represents and warrants that:

1. The Foreign Lender is the sole record owner of the Loans in respect of which it is providing this certificate;

2. The Foreign Lender is not a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Lender further represents and warrants that:

(a) The Foreign Lender is not subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) The Foreign Lender has not been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

3. The Foreign Lender is not a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

4. The Foreign Lender is not a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

5. The undersigned has furnished Administrative Agent and Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E, as applicable.

By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower and Administrative Agent, and (2) if Borrower or Administrative Agent notifies the Foreign Lender that any form or certification the Foreign Lender previously made available has expired or become obsolete in any respect, such Foreign Lender shall furnish Borrower and Administrative Agent with a properly completed and currently effective certificate.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. LENDER]

By _____
Name:
Title:

Date: _____

Exhibit C-1-2

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit C-2**
**to Term Loan Agreement**

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Borrower, CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Participant***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Participant hereby represents and warrants that:

1. The Foreign Participant is the sole record and beneficial owner of the participation in respect of which it is providing this certificate;

2. The Foreign Participant is not a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Participant further represents and warrants that:

(a) The Foreign Participant is not subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) The Foreign Participant has not been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

3. The Foreign Participant is not a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

4. The Foreign Participant is not a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

5. The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E, as applicable.

By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform its participating Lender, and (2) if its participating Lender notifies the Foreign Participant that any form or certification the Foreign Participant previously made available has expired or become obsolete in any respect, the Foreign Participant shall furnish its participating Lender with a properly completed and currently effective certificate.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. PARTICIPANT]

By _____
Name:
Title:

Date: _____

Exhibit C-2-2

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit C-3**
**to Term Loan Agreement**

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the " ***Loan Agreement*** "), among Borrower, CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, " ***Administrative Agent*** "), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the " ***Foreign Participant*** ") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Participant hereby represents and warrants that:

1. The Foreign Participant is the sole record owner of the participation in respect of which it is providing this certificate;

2. The Foreign Participant's direct or indirect partners/members are the sole beneficial owners of the participation in respect of which it is providing this certificate;

3. Neither the Foreign Participant nor its direct or indirect partners/members is a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the " ***Code*** "). In this regard, the Foreign Participant further represents and warrants that:

(a) neither the Foreign Participant nor its direct or indirect partners/members is subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) neither the Foreign Participant nor its direct or indirect partners/members has been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

4. Neither the Foreign Participant nor its direct or indirect partners/members is a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

5. Neither the Foreign Participant nor its direct or indirect partners/members is a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

6. The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms for each of its partners/members that is claiming the portfolio interest exemption : (i) an IRS Form W-8BEN or W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E, as applicable, from each such partner's/member's beneficial owners that is claiming the portfolio interest exemption.

By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform its participating Lender, and (2) if its participating Lender notifies the Foreign Participant that any form or certification the Foreign Participant previously made available has expired or become obsolete in any respect, the Foreign Participant shall furnish its participating Lender with a properly completed and currently effective certificate.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. PARTICIPANT]

By _____
Name:
Title:

Date: _____

Exhibit C-3-2

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit C-4**
**to Term Loan Agreement**

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Borrower, CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Lender***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Lender hereby represents and warrants that:

1. The Foreign Lender is the sole record owner of the Loans in respect of which it is providing this certificate;

2. The Foreign Lender's direct or indirect partners/members are the sole beneficial owners of the Loans in respect of which it is providing this certificate;

3. Neither the Foreign Lender nor its direct or indirect partners/members is a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Lender further represents and warrants that:

(a) neither the Foreign Lender nor its direct or indirect partners/members is subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) neither the Foreign Lender nor its direct or indirect partners/members has been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

4. Neither the Foreign Lender nor its direct or indirect partners/members is a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

5. Neither the Foreign Lender nor its direct or indirect partners/members is a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

6. The undersigned has made available to Borrower (directly or through Administrative Agent) an IRS Form W-8IMY accompanied by one of the following forms for each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E, as applicable, from each such partner's/member's beneficial owners that is claiming the portfolio interest exemption.

By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower and Administrative Agent, and (2) if Borrower or Administrative Agent notifies the Foreign Lender that any form or certification the Foreign Lender previously made available has expired or become obsolete in any respect, such Foreign Lender shall furnish Borrower and Administrative Agent with a properly completed and currently effective certificate.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. LENDER]

By _____
Name:
Title:

Date: _____

Exhibit C-4-2

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit D**
**to Term Loan Agreement**

FORM OF COMPLIANCE CERTIFICATE

[DATE]

This certificate is delivered pursuant to **Section 8.01(d)** of, and in connection with the consummation of the transactions contemplated in, the Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among T2 Biosystems, Inc., a Delaware corporation ("***Borrower***"), CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. Capitalized terms used herein and not otherwise defined herein are used herein as defined in the Loan Agreement.

The undersigned, a duly authorized Responsible Officer of Borrower having the name and title set forth below under his signature, hereby certifies, as an officer of Borrower and on behalf of Borrower (and not in his or her individual capacity), for the benefit of the Secured Parties and pursuant to **Section 8.01(d)** of the Loan Agreement that such Responsible Officer of Borrower is familiar with the Loan Agreement and that, in accordance with each of the following sections of the Loan Agreement, each of the following is true on the date hereof, both before and after giving effect to any Loan to be made on or before the date hereof:

In accordance with Section **8.01** [ **(a)/(b)** ] of the Loan Agreement, attached hereto as **Annex A** are the financial statements for the [fiscal quarter/fiscal year] ended [_____] required to be delivered pursuant to **Section 8.01** [ **(a)/(b)** ] of the Loan Agreement. Such financial statements fairly present in all material respects the consolidated financial position, results of operations and cash flow of Borrower and its Subsidiaries as at the dates indicated therein and for the periods indicated therein in accordance with GAAP [(subject to the absence of footnote disclosure and normal year-end audit adjustments)] [1] [without qualification as to the scope of the audit or as to going concern and without any other similar qualification. The examination by such auditors in connection with such financial statements has been made in accordance with the standards of the United States' Public Company accounting Oversight Board (or any successor entity).] [2]

Attached hereto as **Annex B** are the calculations used to determine compliance with each financial covenant contained in **Section 10** of the Loan Agreement.

No Default or Event of Default is continuing as of the date hereof[, except as provided for on **Annex C** attached hereto, with respect to each of which Borrower proposes to take the actions set forth on **Annex C** ].

The representations and warranties made by Borrower in **Section 7** of the Loan Agreement are true and correct in all material respects (unless qualified by materiality or Material Adverse Effect, in which case they are true and correct in all respects) on and as of the date hereof, with the same force and effect as if made on and as of the date hereof (except that the representation regarding representations and warranties that refer to a specific earlier date shall be that they were true and correct in all material respects (unless qualified by materiality or Material Adverse Effect, in which case they were true and correct in all respects) on such earlier date)[, except as provided for on **Annex D** attached hereto, with respect to each of which Borrower proposes to take the actions set forth on **Annex D** ].

[1] Insert language in brackets only for quarterly certifications.
[2] Insert language in brackets only for annual certifications.

IN WITNESS WHEREOF, the undersigned has executed this certificate on the date first written above.

**T2 BIOSYSTEMS, INC.**

By _____
Name:
Title:

Exhibit D-2

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Annex A to Compliance Certificate**

FINANCIAL STATEMENTS

[see attached]

Exhibit D-3

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Annex B to Compliance Certificate**

CALCULATIONS OF FINANCIAL COVENANT COMPLIANCE

| | | |
|---|---|---|
| **I.** | **Section 10.01: Minimum Liquidity** | |
| A. | Amount of unencumbered [(other than Liens securing the Obligations and Liens permitted pursuant to **Section 9.02(c)** and **Section 9.02(j)** ); *provided* that with respect to case subject to a Lien in connection with Permitted Priority Debt, there is no default under the documentation governing the Permitted Priority Debt]) cash and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in an account over which the Lenders have a perfected security interest: | $_____ |
| B. | The greater of: | $_____ |
| (1) | $[***] and | |
| (2) | to the extent Borrower has incurred Permitted Priority Debt, the minimum cash balance required of Borrower by Borrower's Permitted Priority Debt creditors | |
| | *Is Line IA equal to or greater than Line IB?:* | *Yes: In compliance; No: Not in compliance* |
| **II.** | **Section 10.02(a)-(e): Minimum Revenue—Subsequent Periods** | |
| A. | Revenues during the [***] period beginning on January 1, 2017 | $_____ |
| | *[Is line II.A equal to or greater than $[***]?* | *Yes: In compliance; No: Not in compliance]* [3] |
| B. | Revenues during the [***] period beginning on January 1, 2017 | $_____ |
| | *[Is line II.B equal to or greater than $[***]?* | *Yes: In compliance; No: Not in compliance]* [4] |
| C. | Revenues during the [***] period beginning on January 1, 2018 | $ |
| | *[Is line II.C equal to or greater than $[***]?* | *Yes: In compliance; No: Not in compliance]* [5] |
| D. | Revenues during the [***]period beginning on January 1, 2019 | $ |
| | *[Is line II.D equal to or greater than $[***]?* | *Yes: In compliance; No: Not in compliance]* [6] |
| E. | Revenues during the [***] period beginning on January 1, 2020 | $ |
| | *[Is line II.E equal to or greater than $[***]?* | *Yes: In compliance; No: Not in compliance]* [7] |

[3] Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2017 pursuant to Section 8.01(b) of the Loan Agreement.
[4] Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2018 pursuant to Section 8.01(b) of the Loan Agreement.
[5] Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2019 pursuant to Section 8.01(b) of the Loan Agreement.
[6] Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2020 pursuant to Section 8.01(b) of the Loan Agreement.
[7] Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2021 pursuant to Section 8.01(b) of the Loan Agreement.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit E**
**to Term Loan Agreement**

FORM OF LANDLORD CONSENT

THIS LANDLORD CONSENT (the "***Agreement***") is made and entered into as of [DATE], by and among CRG Servicing LLC, as administrative agent and collateral agent for the "Secured Parties" under the Loan Agreement referred to below (in such capacities, "***Administrative Agent***"), T2 Biosystems, Inc., a Delaware corporation ("***Debtor***"), and [INSERT NAME OF LANDLORD], a [state of formation/organization] [type of entity] ("***Landlord***").

WHEREAS, Debtor has entered into a Term Loan Agreement, dated as of December 30, 2016 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"; capitalized terms used but not defined herein have the meanings assigned to them in the Loan Agreement), among Borrower, Administrative Agent, the lenders from time to time party thereto and the subsidiary guarantors from time to time party thereto, pursuant to which the Secured Parties have been granted a security interest in all of Debtor's personal property, including, but not limited to, inventory, equipment and trade fixtures (hereinafter "***Personal Property***"); and

WHEREAS, Landlord is the owner of the real property located at [_____] (the "***Premises***"); and

WHEREAS, Landlord and Debtor have entered into that certain [LEASE AGREEMENT] dated [_____][, as amended by [_____] dated [_____]] ([collectively,] the "***Lease***"); and

WHEREAS, certain of the Personal Property has or may become affixed to or be located on, wholly or in part, the Premises.

NOW, THEREFORE, in consideration of any loans or other financial accommodation extended by the Secured Parties to Debtor at any time, and other good and valuable consideration, the parties agree as follows:

1. Landlord subordinates to Administrative Agent (for the benefit of the Secured Parties) all security interests or other interests or rights Landlord may now or hereafter have in, or to any of the Personal Property, whether for rent or otherwise, while Debtor is indebted to the Secured Parties.

2. The Personal Property may be installed in or located on the Premises and is not and shall not be deemed a fixture or part of the real estate and shall at all times be considered personal property.

3. Administrative Agent or its representatives may enter upon the Premises during normal business hours, and upon not less than 24 hours' advance notice, to inspect the Personal Property.

4. Upon and during the continuance of an Event of Default under the Loan Agreement, Administrative Agent or its representatives, at Administrative Agent's option, upon written notice delivered to Landlord not less than [***] in advance, may enter the Premises during normal business hours for the purpose of repossessing, removing or otherwise dealing with said Personal Property; *provided* that neither Administrative Agent nor Secured Parties shall be permitted to operate the business of Debtor on the Premises or sell, auction or otherwise dispose of any Personal Property at the Premises or advertise any of the foregoing; and such license shall continue, from the date Administrative Agent enters the Premises for as long as Administrative Agent reasonably deems necessary but not to exceed a period of ninety (90) days. During the period Administrative Agent occupies the Premises, it shall pay to Landlord the rent provided under the Lease relating to the Premises, prorated on a per diem basis to be determined on a thirty (30) day month, without incurring any other obligations of Debtor.

5. Administrative Agent shall pay to Landlord any costs for damage to the Premises or the building in which the Premises is located in removing or otherwise dealing with said Personal Property pursuant to paragraph 4 above, and shall indemnify and hold harmless Landlord from and against (i) all claims, disputes and expenses, including reasonable attorneys' fees, suffered or incurred by Landlord arising from Administrative Agent's exercise of any of its rights hereunder, and (ii) any injury to third persons, caused by actions of Administrative Agent pursuant to this consent.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

6. Landlord agrees to give notice to Administrative Agent in writing by certified mail or facsimile of Landlord's intent to exercise its remedies in response to any default by Debtor of any of the provisions of the Lease, to:

CRG Servicing LLC
1000 Main Street, Suite 2500
Houston, TX 77002
Attention: General Counsel
Fax: 713.209.7351

7. Landlord shall have no obligation to preserve or protect the Personal Property or take any action in connection therewith, and Administrative Agent waives all claims they may now or hereafter have against Landlord in connection with the Personal Property.

8. This consent shall terminate and be of no further force or effect upon the earlier of (i) the date on which all indebtedness secured by the Personal Property indefeasibly is paid in full in cash and (ii) the date on which the Lease is terminated or expires.

9. Nothing contained herein shall be construed to amend the Lease, and the Lease remains unchanged and in full force and effect.

This consent shall be construed and interpreted in accordance with and governed by the laws of the State of [_____].

This consent may not be changed or terminated orally and is binding upon and shall inure to the benefit of Landlord, Administrative Agent, Secured Parties and Debtor and the heirs, personal representatives, successors and assigns of Landlord, Administrative Agent, Secured Parties and Debtor.

[Signature Page follows]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

LANDLORD:
[_____]

By _____
Name:
Title:

ADMINISTRATIVE AGENT:

CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:

1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com

Acknowledged and Agreed:
T2 BIOSYSTEMS, INC.

By _____
Name:
Title:


[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit F**
**to Term Loan Agreement**

FORM OF SUBORDINATION AGREEMENT

This Subordination Agreement is made as of [_____] (this "***Agreement***") among CRG Servicing LLC, a Delaware limited liability company ("***Senior Agent***"), and [_____], a [_____] [corporation] ("***Subordinated Creditor***").

RECITALS:

A. T2 Biosystems, Inc., a Delaware corporation ("***Borrower***"), will, as of the date hereof, issue in favor of Subordinated Creditor the Subordinated Note (as defined below)[, and grant a security interest in the Subordinated Collateral (as defined below) in favor of Subordinated Creditor].

B. Senior Creditors, Borrower and certain of its subsidiaries have entered into the Senior Loan Agreement (as defined below), and Senior Agent, Borrower and certain of its subsidiaries have entered into the Senior Security Agreement (as defined below) under which Borrower and such subsidiaries have granted a security interest in the Collateral (as defined below) in favor of the Senior Creditors as security for the payment of Borrower's obligations under the Senior Loan Agreement.

C. To induce the Lenders under and as defined in the Senior Loan Agreement referred to below to make and maintain the credit extensions to Borrower under the Senior Loan Agreement, Subordinated Creditor is willing to subordinate the Subordinated Debt (as defined below) to the Senior Debt (as defined below)[, and all liens securing the Subordinated Debt to the Senior Creditors' liens on and security interests in the Collateral] on the terms and conditions herein set forth.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

**1. Definitions**. As used herein, the following terms have the following meanings:

"***Bankruptcy Code***" means title 11 of the United States Code, 11 U.S.C. §§ 101 *et seq*.

"***Collateral***" has the meaning set forth in the Senior Security Agreement.

"***Enforcement Action***" means, with respect to any indebtedness, obligation (contingent or otherwise) or Collateral at any time held by any lender or noteholder, (i) commencing, by judicial or non-judicial means, the enforcement of, or otherwise attempting to enforce, such indebtedness, obligation or Collateral of any of the default remedies under any of the applicable agreements or documents of such lender or noteholder, the UCC or other applicable law (other than the mere issuance of a notice of default or notice of the right by such lender or noteholder to seek specific performance with respect to any covenants in favor of such lender or noteholder), (ii) repossessing, selling, leasing or otherwise disposing of all or any part of such Collateral, including without limitation causing any attachment of, levy upon, execution against, foreclosure upon or the taking of other action against or institution of other proceedings with respect to any Collateral, or exercising account debtor or obligor notification or collection rights with respect to all or any portion thereof, or attempting or agreeing to do so, (iii) appropriating, setting off or applying to such lender or noteholder's claim any part or all of such Collateral or other property in the possession of, or coming into the possession of, such lender or noteholder or its agent, trustee or bailee, (iv) asserting any claim or interest in any insurance with respect to such indebtedness, obligation or Collateral, (v) instituting or commencing, or joining with any Person in commencing, any action or proceeding with respect to any of the foregoing rights or remedies (including any action of foreclosure, enforcement, collection or execution and any Insolvency Event involving any Obligor), (vi) exercising any rights under any lockbox agreement, account control agreement, landlord waiver or bailee's letter or similar agreement or arrangement to which the Subordinated Creditor is a party, (vii) [causing or compelling the pledge or delivery of Subordinated Collateral], or (viii) otherwise enforcing, or attempting to enforce, any other rights or remedies under or with respect to any such indebtedness, obligation or Collateral.

"***Insolvency Event***" means that any Obligor or any of its subsidiaries shall have (i) applied for, consented to or acquiesced in the appointment of a trustee, receiver or other custodian for it or any of its property, or (ii) made a general assignment for the benefit of creditors or similar arrangement in respect of such Obligor's or subsidiary's creditors generally or any substantial portion

thereof, or (iii) permitted, consented to, or suffered to exist the appointment of a trustee, receiver or other custodian for it or for a substantial part of its property, or (iv) commenced any case, action or proceeding before any court or other governmental agency or authority relating to bankruptcy, reorganization, insolvency, debt arrangement or relief or other case, action or proceeding under any bankruptcy or insolvency law, or any dissolution, winding up or liquidation case, action or proceeding, including without limitation any case under the Bankruptcy Code, in respect of it, or (v) (A) permitted, consented to, or suffered to exist the commencement of any case, action or proceeding before any court or other governmental agency or authority relating to bankruptcy, reorganization, insolvency, debt arrangement or relief or other case, action or proceeding under any bankruptcy or insolvency law, or any dissolution, winding up or liquidation case, action or proceeding, including without limitation any case under the Bankruptcy Code, in respect of it, or (B) any such case, action or proceeding shall have resulted in the entry of an order for relief or shall have remained for sixty (60) days undismissed.

" ***Obligor*** " has the meaning set forth in the Senior Loan Agreement.

" ***Person*** " has the meaning set forth in the Senior Loan Agreement.

" ***Senior Creditors*** " means Senior Agent and the Lenders under and as defined in the Senior Loan Agreement.

" ***Senior Debt*** " means the Obligations (as defined in the Senior Loan Agreement).

" ***Senior Discharge Date*** " means the first date on which all of the Senior Debt (other than contingent indemnification obligations and any Warrant Obligations (as defined in the Senior Loan Agreement)) has been paid indefeasibly in full in cash and all commitments of Senior Lenders under the Senior Loan Documents have been terminated.

" ***Senior Loan Agreement*** " means that certain Term Loan Agreement, dated as of December 30, 2016, by and among Borrower, the subsidiary guarantors from time to time party thereto, and the Senior Creditors from time to time party thereto, as amended, restated, supplemented or otherwise modified from time to time.

" ***Senior Loan Documents*** " means, collectively, the Loan Documents (as defined in the Senior Loan Agreement), in each case as amended, restated, supplemented or otherwise modified from time to time.

" ***Senior Security Agreement*** " means that certain Security Agreement, dated as of December 30, 2016, among Borrower, the other Obligors party thereto, and Senior Agent, as amended, restated, supplemented or otherwise modified from time to time.

[" ***Subordinated Collateral*** " means any property or assets that may at any time be or become subject to a lien or security interest in favor of the Subordinated Creditor pursuant to the Subordinated Collateral Documents or otherwise, and all products and proceeds of any of the foregoing.]

[" ***Subordinated Collateral Documents*** " means, collectively, each security agreement, deed of trust, mortgage, pledge agreement and any other agreement pursuant to which any Obligor or any other Person provides a lien on or security interest in its assets in favor of the Subordinated Creditor, and all financing statements, fixture filings, patent, trademark and copyright filings, assignments, acknowledgments and other filings, documents and agreements made or delivered pursuant thereto.]

" ***Subordinated Debt*** " means and includes all obligations, liabilities and indebtedness of Borrower owed to Subordinated Creditor, whether direct or indirect, absolute or contingent, due or to become due, or now existing or hereafter incurred, including without limitation, principal, premium (if any), interest, fees, charges, expenses, costs, professional fees and expenses, and reimbursement obligations.

" ***Subordinated Debt Documents*** " means, collectively, the Subordinated Note and each other loan document or agreement entered into by Borrower in connection with the Subordinated Note[, including without limitation each Subordinated Collateral Document], as amended, restated, supplemented or otherwise modified from time to time.

" ***Subordinated Note*** " means that certain $[_____] subordinated promissory note, dated [_____], issued by Borrower to Subordinated Creditor, as amended, restated, supplemented or otherwise modified from time to time.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

" ***UCC*** " means the Uniform Commercial Code of any applicable jurisdiction and, if the applicable jurisdiction shall not have any Uniform Commercial Code, the Uniform Commercial Code as in effect in the State of New York.

**2. Liens** . (a) Subordinated Creditor represents and warrants that [8] [the Subordinated Debt is unsecured. Subordinated Creditor agrees that it will not request or accept any security interest in any Collateral to secure the Subordinated Debt; *provided* that, should Subordinated Creditor obtain a lien or security interest on any asset or Collateral to secure all or any portion of the Subordinated Debt for any reason (which action shall be in violation of this Agreement), notwithstanding the respective dates of attachment and perfection of the security interests in the Collateral in favor of the Senior Creditors or Subordinated Creditor, or any contrary provision of the UCC, or any applicable law or decision to the contrary, or the provisions of the Senior Loan Documents or the Subordinated Debt Documents, and irrespective of whether Subordinated Creditor or the Senior Creditors hold possession of any or all part of the Collateral, all now existing or hereafter arising security interests in the Collateral in favor of Subordinated Creditor in respect of the Subordinated Debt Documents shall at all times be subordinate to the security interest in such Collateral in favor of the Senior Creditors in respect of the Senior Loan Documents.] [all liens and security interests, if any, now or hereafter existing that secure the Subordinated Debt, are hereby subordinated and junior in all respects to the liens and security interests now or hereafter existing securing the Senior Debt, regardless of the time, manner or order of attachment or perfection of any such liens and security interests, the time or order of filing of financing statements, the acquisition of purchase money or other liens or security interests, the time of giving or failure to give notice of the acquisition or expected acquisition of purchase money or other liens or security interests, or any other circumstances whatsoever.]

(b) Subordinated Creditor acknowledges that the Senior Creditors have been granted liens upon the Collateral [(including the Subordinated Collateral)], and Subordinated Creditor hereby consents thereto and to the incurrence of the Senior Debt.

(c) Until the Senior Discharge Date, in the event of any private or public sale or other disposition of all or any portion of the Collateral, Subordinated Creditor agrees that such Collateral shall be sold or otherwise disposed of free and clear of any liens in favor of Subordinated Creditor. Subordinated Creditor agrees that any such sale or disposition of Collateral shall not require any consent from Subordinated Creditor, and Subordinated Creditor hereby waives any right it may have to object to such sale or disposition.

(d) [Subordinated Creditor agrees that it will not request or accept any guaranty of the Subordinated Debt.]

(e) [Each of the Senior Creditors and Subordinated Creditor agrees to hold all collateral in which a lien may be perfected by possession or control (" ***Possessory Collateral*** ") in its possession, custody, or control (or in the possession, custody, or control of agents or bailees for any such party) as agent for the other solely for the purpose of perfecting the security interest granted to each in such Possessory Collateral subject to the terms and conditions of this Agreement. Neither any Senior Creditor nor Subordinated Creditor shall have any obligation

whatsoever to the other to assure that any Possessory Collateral is genuine or owned by any Obligor or any other Person or to preserve its rights or benefits or those of any Person. The duties or responsibilities of the Senior Creditors and Subordinated Creditor under this **Section 2(e)** are and shall be limited solely to holding or maintaining control of the Possessory Collateral as agent for the others for purposes of perfecting the lien or security interest held by such others. The Senior Creditors are not and shall not be deemed to be a fiduciary of any kind for Subordinated Creditor or any other Person.]

**3. Payment Subordination** . (a) Notwithstanding the terms of the Subordinated Debt Documents, until the Senior Discharge Date, (i) all payments and distributions of any kind or character, whether in cash, property or securities, in respect of the Subordinated Debt are subordinated in right and time of payment to all payments in respect of the Senior Debt, and (ii) Subordinated Creditor will not demand, sue for or receive from Borrower (and Borrower will not pay) any part of the Subordinated Debt, whether by payment, prepayment, distribution, setoff, or otherwise, or accelerate the Subordinated Debt.

(b) Subordinated Creditor must deliver to the Senior Agent in the form received (except for endorsement or assignment by Subordinated Creditor) any payment, distribution, security or proceeds it receives on the Subordinated Debt other than according to this Agreement.

[8] Select one, as appropriate.

**4.** **Subordination of Remedies** . Until the Senior Discharge Date, and whether or not any Insolvency Event has occurred, Subordinated Creditor will not accelerate the maturity of all or any portion of the Subordinated Debt, enforce, attempt to enforce, or exercise any right or remedy with respect to any Collateral [(including the Subordinated Collateral)] or the Subordinated Debt, or take any other Enforcement Action with respect to the Subordinated Debt [or the Subordinated Collateral].

**5.** **Payments Over** . All payments and distributions of any kind, whether in cash, property or securities, in respect of the Subordinated Debt to which Subordinated Creditor would be entitled if the Subordinated Debt were not subordinated pursuant to this Agreement, shall be paid to the Senior Creditors in respect of the Senior Debt, regardless of whether such Senior Debt, or any portion thereof, is reduced, expunged, disallowed, subordinated or recharacterized. Notwithstanding the foregoing, if any payment or distribution of any kind, whether in cash, property or securities, shall be received by Subordinated Creditor on account of the Subordinated Debt [or the Subordinated Collateral] before Senior Discharge Date (whether or not expressly characterized as such), then such payment or distribution shall be segregated by Subordinated Creditor and held in trust for, and shall be promptly paid over to, the Senior Creditors in the same form as received, with any necessary endorsements or as a court of competent jurisdiction may otherwise direct, in respect of the Senior Debt, regardless of whether such Senior Debt, or any portion thereof, is reduced, expunged, disallowed, subordinated or recharacterized. Subordinated Creditor irrevocably appoints the Senior Agent as Subordinated Creditor's attorney-in-fact, and grants to the Senior Creditors a power of attorney with full power of substitution (which power of attorney is coupled with an interest), in the name of Subordinated Creditor or in the name of the Senior Agent, for the use and benefit of the Senior Creditors, without notice to Subordinated Creditor, to make any such endorsements. This **Section 5** shall be enforceable even if the Senior Creditors' liens on the Collateral are alleged, determined, or held to constitute fraudulent transfers (whether constructive or actual), preferential transfers, or otherwise avoided or voidable, set aside, recharacterized or equitably subordinated.

**6.** **Insolvency Proceedings** . (a) This Agreement is intended to constitute and shall be deemed to constitute a "subordination agreement" within the meaning of Section 510(a) of the Bankruptcy Code and is intended to be and shall be interpreted to be enforceable to the maximum extent permitted pursuant to applicable nonbankruptcy law. All references to Borrower or any other Obligor shall include Borrower or such Obligor as debtor and debtor-in-possession and any receiver or trustee for Borrower or any other Obligor (as the case may be) in connection with any case under the Bankruptcy Code or in connection with any other Insolvency Event.

(b) Without limiting the generality of the other provisions of this Agreement, until the Senior Discharge Date, without the express written consent of the Senior Agent, Subordinated Creditor shall not institute or commence (nor shall it join with or support any third party instituting, commencing, opposing, objecting or contesting, as the case may be, or otherwise suffer to exist), any Insolvency Event involving Borrower or any other Obligor.

(c) The Senior Creditors shall have the right to enforce rights, exercise remedies (including set-off and the right to credit bid its debt) and make determinations regarding the release, disposition, or restrictions with respect to the Collateral without any consultation with or consent of Subordinated Creditor.

(d) Subordinated Creditor will not, and hereby waives any right to bring, join in, or otherwise support or take any action to (i) contest the validity, legality, enforceability, perfection, priority or avoidability of any of the Senior Debt, any of the Senior Loan Documents or any security interests and/or liens of the Senior Creditors on or in any property or assets of Borrower or any other Obligor, including without limitation, the Collateral; (ii) interfere with or in any manner oppose or support any other Person in opposing any foreclosure on or other disposition of any Collateral by the Senior Creditors in accordance with applicable law, or otherwise to contest, protest, object to or interfere with the manner in which the Senior Creditors may seek to enforce the Liens on any Collateral; (iii) provide a debtor-in-possession facility (including on a priming basis) to Borrower or any other Obligor, under Section 362, 363 or 364 of the Bankruptcy Code or any other applicable law, without the consent, in their sole discretion, of the Senior Creditors; or (iv) exercise any rights against the Senior Creditors or the Collateral under Section 506(c) of the Bankruptcy Code. [Subordinated Creditor hereby waives any and all rights it may have as a junior lien creditor or otherwise to contest, protest, object to or interfere with the manner in which any Senior Creditor seeks to enforce its liens on or security interests in any Collateral.]

(e) Subordinated Creditor will not, and hereby waives any right to, oppose, contest, object to, join in, or otherwise support any opposition to or objection with respect to, (i) any request or motion of the Senior Creditors seeking, pursuant to Section 362(d) of the Bankruptcy Code or otherwise, the modification, lifting or vacating of the automatic stay of Section 362(a) of the Bankruptcy Code or from any other stay in connection with any Insolvency Event or seeking adequate protection of the Senior Creditors' interests in the Collateral or with respect to the Senior Debt (whether under Sections 362, 363, and/or 364 of the Bankruptcy Code or other applicable law), and, until Senior Discharge Date, Subordinated Creditor agrees that it shall not seek relief from such automatic stay without the prior written consent of the Senior Agent; (ii) any debtor-in-possession financing (including on a

priming basis) or use of cash collateral (as defined in Section 363(a) of the Bankruptcy Code or other applicable law) arrangement by Borrower, whether from the Senior Creditors or any other third party under Section 362, 363 or 364 of the Bankruptcy Code or any other applicable law, if the Senior Creditors, in their sole discretion, consent to such debtor-in-possession financing or cash collateral arrangement, and Subordinated Creditor shall not request adequate protection (whether under Sections 362, 363, and/or 364 of the Bankruptcy Code or other applicable law) or any other relief in connection therewith; (iii) any sale or other disposition of the Collateral or substantially all of the assets of Borrower or any other Obligor (include any such sale free and clear of liens or other claims) under Section 363 of the Bankruptcy Code or other applicable law if the Senior Creditors, in their sole discretion, consent to such sale or disposition; (vii) the Senior Creditors' exercise or enforcement of its right to make an election under Section 1111(b) of the Bankruptcy Code, and Subordinated Creditor hereby waives any claim it may hereafter have against the Senior Creditors arising out of such election; (viii) the Senior Creditors' exercise or enforcement of its right to credit bid any or all of its debt claims against Borrower or any other Obligor, including, without limitation, the Senior Debt; or (ix) any plan of reorganization or liquidation if the Senior Creditors, in their sole discretion, consent to, vote in favor of, or otherwise do not oppose such plan of reorganization or liquidation, and, in furtherance thereof, Subordinated Creditor hereby grants to the Senior Creditors the right to vote Subordinated Creditor's claim or claims (as such term is defined in the Bankruptcy Code) arising on account of or in connection with the Subordinated Debt, as Subordinated Creditor's agent, with respect to any plan of reorganization or liquidation to which Subordinated Creditor may be entitled to vote in any bankruptcy or liquidation proceeding or in connection with any other Insolvency Event of Borrower or any other Obligor.

**7. Distributions of Proceeds of Collateral** . All realizations upon any Collateral pursuant to or in connection with an Enforcement Action, an Insolvency Event or otherwise shall be paid or delivered to the Senior Agent in respect of the Senior Debt until the Senior Discharge Date before any payment may be made to Subordinated Creditor.

**8. Release of Liens** . In the event of any private or public sale or other disposition, by or with the consent of the Senior Agent, of all or any portion of the Collateral, Subordinated Creditor agrees that such sale or disposition shall be free and clear of any liens Subordinated Creditor may have on such Collateral[, and, if the sale or other disposition includes any pledged equity interests in any Obligor, if the Subordinated Collateral includes any such any pledged equity interests, the Subordinated Creditor further agrees to release the entities whose pledged equity interests are sold from all Subordinated Debt]. Subordinated Creditor agrees that, in connection with any such sale or other disposition, (i) the Senior Creditors are authorized to file any and all UCC and other applicable lien releases and/or terminations in respect of any liens held by Subordinated Creditor in connection with such a sale or other disposition, and (ii) it shall execute any and all lien releases or other documents reasonably requested by the Senior Agent in connection therewith. In furtherance of the foregoing, Subordinated Creditor hereby appoints the Senior Agent as its attorney-in-fact, with full authority in the place and stead of Subordinated Creditor and full power of substitution and in the name of Subordinated Creditor or otherwise, to execute and deliver any document or instrument which Subordinated Creditor is required to deliver pursuant to this **Section 8** , such appointment being coupled with an interest and irrevocable. Subordinated Creditor agrees that the Senior Creditors may release or refrain from enforcing their security interest in any Collateral, or permit the use or consumption of such Collateral by Borrower free of any Subordinated Creditor security interest, without incurring any liability to Subordinated Creditor.

**9. Attorney-In-Fact** . Until the Senior Discharge Date, Subordinated Creditor irrevocably appoints the Senior Agent as its attorney-in-fact, with power of attorney with power of substitution, in Subordinated Creditor's name or in any Senior Creditor's name, for the Senior Creditors' use and benefit without notice to Subordinated Creditor, to do the following during an Insolvency Event:

(a) file any claims in respect of the Subordinated Debt on behalf of Subordinated Creditor if Subordinated Creditor does not do so at least 30 days before the time to file claims expires; and

(b) vote Subordinated Creditor's claim or claims (as such term is defined in the Bankruptcy Code) arising on account of or in connection with the Subordinated Debt, as Subordinated Creditor's agent, with respect to any plan of reorganization or liquidation to which Subordinated Creditor may be entitled to vote in any bankruptcy or liquidation proceeding or in connection with any other Insolvency Event of Borrower or any other Obligor.

Such power of attorney is irrevocable and coupled with an interest.

**10. Legend; Amendment of Debt** . (a) Subordinated Creditor will immediately put a legend on or otherwise indicate on the Subordinated Note that the Subordinated Note is subject to this Agreement.

(b) Until the Senior Discharge Date, Subordinated Creditor shall not, without prior written consent of the Senior Agent, agree to any amendment, modification or waiver of any provision of the Subordinated Debt Documents, if the effect of such

amendment, modification or waiver is to: (i) terminate or impair the subordination of the Subordinated Debt in favor of the Senior Creditors; (ii) increase the interest rate on the Subordinated Debt or change (to earlier dates) the dates upon which principal, interest and other sums are due under the Subordinated Note; (iii) alter the redemption, prepayment or subordination provisions of the Subordinated Debt; (iv) impose on Borrower or any other Obligor any new or additional prepayment charges, premiums, reimbursement obligations, reimbursable costs or expenses, fees or other payment obligations; (v) alter the representations, warranties, covenants, events of default, remedies and other provisions in a manner which would make such provisions materially more onerous, restrictive or burdensome to Borrower or any other Obligor; (vi) [9] [grant a lien or security interest in favor of any holder of the Subordinated Debt on any asset or Collateral to secure all or any portion of the Subordinated Debt][terminate or impair the subordination of any security interest or lien securing the Subordinated Debt in favor of the Senior Creditors]; or (vii) otherwise increase the obligations, liabilities and indebtedness in respect of the Subordinated Debt or confer additional rights upon Subordinated Creditor, which individually or in the aggregate would be materially adverse to Borrower, any other Obligor or the Senior Creditors. Any such amendment, modification or waiver made in violation of this **Section 10(b)** shall be void.

(c) At any time without notice to Subordinated Creditor, the Senior Creditors may take such action with respect to the Senior Debt as the Senior Creditors, in their sole discretion, may deem appropriate, including, without limitation, terminating advances, increasing the principal, extending the time of payment, increasing interest rates, renewing, compromising or otherwise amending any documents affecting the Senior Debt and any Collateral securing the Senior Debt, and enforcing or failing to enforce any rights against Borrower or any other person. No action or inaction will impair or otherwise affect any Senior Creditor's rights under this Agreement.

**11. Certain Waivers** . (a) Subordinated Creditor hereby (i) waives any and all notice of the incurrence of the Senior Debt or any part thereof; (ii) waives any and all rights it may have to require the Senior Creditors to marshal assets, to exercise rights or remedies in a particular manner, to forbear from exercising such rights and remedies in any particular manner or order, or to claim the benefit of any appraisal, valuation or other similar right that may otherwise be available under applicable law, regardless of whether any action or failure to act by or on behalf of the Senior Creditors is adverse to the interest of Subordinated Creditor; (iii) agrees that the Senior Creditors shall have no liability to Subordinated Creditor, and Subordinated Creditor hereby waives any claim against the Senior Creditors arising out of any and all actions not in breach of this Agreement which the Senior Creditors may take or permit or omit to take with respect to the Senior Loan Documents (including any failure to perfect or obtain perfected security interests in the Collateral), the collection of the Senior Debt or the foreclosure upon, or sale, liquidation or other disposition of, any Collateral; and (iv) agrees that the Senior Creditors have no duty, express or implied, fiduciary or otherwise, to them in respect of the maintenance or preservation of the Collateral, the Senior Debt or otherwise. Without limiting the foregoing, Subordinated Creditor agrees that the Senior Creditors shall have no duty or obligation to maximize the return to any class of creditors holding indebtedness of any type (whether Senior Debt or Subordinated Debt), notwithstanding that the order and timing of any realization, sale, disposition or liquidation of the Collateral may affect the amount of proceeds actually received by such class of creditors from such realization, sale, disposition or liquidation.

(b) Subordinated Creditor confirms that this Agreement shall govern as between the Senior Creditors and the Subordinated Creditor irrespective of: (i) any lack of validity or enforceability of any Senior Loan Document or any Subordinated Debt Document; (ii) the occurrence of any Insolvency Event in respect of any Obligor; (iii) whether the Senior Debt, or the liens or security interests securing the Senior Debt, shall be held to be unperfected, deficient, invalid, void, voidable, voided, unenforceable, subordinated, reduced, discharged or are set aside by a court of competent jurisdiction, including pursuant or in connection with any Insolvency Event; (iv) any change in the time, manner or place of payment of, or in any other terms of, all or any of the Senior Debt or the Subordinated Debt, or any amendment or waiver or other modification, including any increase in the amount thereof, whether by course of conduct or otherwise, of the terms of any Senior Loan Document or any Subordinated Debt Document or any guarantee thereof; or (v) any other circumstances which otherwise might constitute a defense available to, or a discharge of, any Obligor in respect of the Senior Debt or the Subordinated Debt.

**12. Representations and Warranties** . Subordinated Creditor represents and warrants to the Senior Creditors that:

(a) all action on the part of Subordinated Creditor, its officers, directors, partners, members and shareholders, as applicable, necessary for the authorization of this Agreement and the performance of all obligations of Subordinated Creditor hereunder has been taken;

[9] Select one, as appropriate.

(b) this Agreement constitutes the legal, valid and binding obligation of Subordinated Creditor, enforceable against Subordinated Creditor in accordance with its terms;

(c) the execution, delivery and performance of and compliance with this Agreement by Subordinated Creditor will not (i) result in any material violation or default of any term of any of Subordinated Creditor's charter, formation or other organizational documents (such as Articles or Certificate of Incorporation, bylaws, partnership agreement, operating agreement, etc.) or (ii) violate any material applicable law, rule or regulation; and

(d) Subordinated Creditor has not previously assigned any interest in the Subordinated Debt[ or any Subordinated Collateral], and no Person other than the Subordinated Creditor owns an interest in the Subordinated Debt[ or Subordinated Collateral].

**13. Term; Reinstatement** . This Agreement shall remain in full force and effect until the Senior Discharge Date, notwithstanding the occurrence of an Insolvency Event. If, after the Senior Discharge Date, the Senior Creditors must disgorge any payments made on the Senior Debt for any reason (including, without limitation, in connection with the bankruptcy of Borrower or in connection with any other Insolvency Event), this Agreement and the relative rights and priorities provided in it, will be reinstated as to all disgorged payments as though such payments had not been made, and Subordinated Creditor will immediately pay the Senior Agent all payments received in respect of the Subordinated Debt to the extent such payments or retention thereof would have been prohibited under this Agreement.

**14. Successors and Assigns** . This Agreement binds Subordinated Creditor, its successors or assigns, and benefits the Senior Creditors' successors or assigns. This Agreement is for Subordinated Creditor's and the Senior Creditors' benefit and not for the benefit of Borrower or any other party. Subordinated Creditor shall not sell, assign, pledge, dispose of or otherwise transfer all or any portion of the Subordinated Debt or any related document or any interest in any Collateral therefor unless prior to the consummation of any such action, the transferee thereof shall execute and deliver to the Senior Agent an agreement of such transferee to be bound hereby, or an agreement substantially identical to this Agreement providing for the continued subjection of the Subordinated Debt, the interests of the transferee in the Collateral and the remedies of the transferee with respect thereto as provided herein with respect to Subordinated Creditor and for the continued effectiveness of all of the other rights of the Senior Creditors arising under this Agreement, in each case in form satisfactory to the Senior Creditors. Any such sale, assignment, pledge, disposition or transfer not made in compliance with the terms of this **Section 14** shall be void.

**15. Further Assurances** . Subordinated Creditor hereby agrees to execute such documents and/or take such further action as the Senior Agent may at any time or times reasonably request in order to carry out the provisions and intent of this Agreement, including, without limitation, ratifications and confirmations of this Agreement from time to time hereafter, as and when requested by the Senior Agent.

**16. Counterparts** . This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. Executed counterparts may be delivered by facsimile.

**17. Governing Law; Waiver of Jury Trial** . (a) This Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; *provided* that Section 5-1401 of the New York General Obligations Law shall apply.

(b) EACH PARTY HERETO WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN.

**18. Entire Agreement; Waivers and Amendments** . This Agreement represents the entire agreement with respect to the subject matter hereof, and supersedes all prior negotiations, agreements and commitments. The Senior Creditors and Subordinated Creditor are not relying on any representations by the other creditor party or Borrower in entering into this Agreement, and each of the Senior Creditors and Subordinated Creditor has kept and will continue to keep itself fully apprised of the financial and other condition of Borrower. No amendment, modification, supplement, termination, consent or waiver of or to any provision of this Agreement, nor any consent to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the Senior Agent and Subordinated Creditor. Any waiver of any provision of this Agreement, or any consent to any departure from the terms of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which given.

**19.** **No Waiver** . No failure or delay on the part of any Senior Creditor or Subordinated Creditor in the exercise of any power, right, remedy or privilege under this Agreement shall impair such power, right, remedy or privilege or shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude any other or further exercise of any other power, right or privilege. The rights and remedies under this Agreement are cumulative and not exclusive of any rights, remedies, powers and privileges that may otherwise be available to any Senior Creditor.

**20.** **Legal Fees** . In the event of any legal action to enforce the rights of a party under this Agreement, the party prevailing in such action shall be entitled, in addition to such other relief as may be granted, all reasonable, invoiced and out-of-pocket costs and expenses, including reasonable attorneys' fees, incurred in such action.

**21.** **Severability** . Any provision of this Agreement which is illegal, invalid, prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent such illegality, invalidity, prohibition or unenforceability without invalidating or impairing the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction.

**22.** **Notices** . All notices, demands, instructions and other communications required or permitted to be given to or made upon any party hereto shall be in writing and shall be delivered or sent by first-class mail, postage prepaid, or by overnight courier or messenger service or by facsimile or electronic mail, message confirmed, and shall be deemed to be effective for purposes of this Agreement on the day that delivery is made or refused. Unless otherwise specified in a notice mailed or delivered in accordance with the foregoing sentence, notices, demands, instructions and other communications in writing shall be given to or made upon the respective parties hereto at their respective addresses and facsimile numbers indicated on the signature pages hereto.

**23.** **No Third-Party Beneficiaries; Other Benefits** . The terms and provisions of this Agreement are intended solely for the benefit of each party hereto and their respective successors and permitted assigns, and the parties do not intend to confer third party beneficiary rights upon any other person. Subordinated Creditor understands that there may be various agreements between the Senior Creditors and Borrower or the other Obligors evidencing and governing the Senior Debt, and Subordinated Creditor acknowledges and agrees that such agreements are not intended to confer any benefits on Subordinated Creditor and that the Senior Creditors shall have no obligation to Subordinated Creditor or any other Person to exercise any rights, enforce any remedies, or take any actions which may be available to it under such agreements.

[Signature pages follow]



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

SUBORDINATED CREDITOR:
[_____]

By _____
Name:
Title:

Address for Notices:

SENIOR AGENT (on behalf of the SENIOR CREDITORS):

CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:

1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com

T2 BIOSYSTEMS, INC.

By _____
Name:
Title:

Address for Notices:
[_____]
[_____]
[_____]
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit G**
**to Term Loan Agreement**

FORM OF INTERCREDITOR AGREEMENT

This Intercreditor Agreement, dated as of [_____] (this " ***Agreement*** "), is made between CRG Servicing LLC, a Delaware limited liability company, as Administrative Agent, and [INSERT NAME OF A/R LENDER], a [_____] (" ***[A/R Lender]*** ").

RECITALS

A. T2 Biosystems, Inc., a Delaware corporation (" ***Borrower*** "), has entered into the A/R Facility Agreement (as defined below) with [A/R Lender], which, along with any other obligations owing to [A/R Lender] by Borrower, is secured by certain property of Borrower [and the other Obligors (as defined below)].

B. Borrower [has][and the other Obligors have] entered into that certain Term Loan Agreement, dated as of December 30, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the " ***CRG Credit Agreement*** "), with certain lenders and CRG Servicing LLC, a Delaware limited liability company, as administrative agent and collateral agent for such lenders (in such capacities and together with its successors and assigns, " ***CRG Agent*** "), which is secured by certain property of Borrower [and the other Obligors].

C. To induce each of [A/R Lender] and the lenders under the CRG Credit Agreement to make and maintain the credit extensions under the A/R Facility Agreement and the CRG Credit Agreement, respectively, each of [A/R Lender] and CRG Agent, on behalf of the "Secured Parties" (as defined in the CRG Credit Agreement, the " ***CRG Creditors*** "; CRG Creditors, collectively with [A/R Lender], " ***Creditors*** " and each individually, a " ***Creditor*** "), is willing to enter into this Agreement to, among other things, subordinate certain of its liens on the terms and conditions herein set forth.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

**1. Definitions** . As used herein, the following terms have the following meanings:

" ***A/R Facility Agreement*** " means that certain [Credit Agreement], dated as of [_____], between [A/R Lender] and Borrower, as the same may be amended, restated, supplemented or otherwise modified from time to time.

" ***A/R Facility Documents*** " means the A/R Facility Agreement and all [Loan Documents], each as defined in the A/R Facility Agreement.

" ***A/R Facility Senior Collateral*** " means (i) [Borrower's] accounts arising from the sale or lease of inventory or the provision of services, excluding IP/Equipment Accounts (collectively, " ***Inventory/Service Accounts*** "), (ii) [Borrower's] inventory, (iii) to the extent evidencing, governing, or securing [Borrower's] Inventory/Service Accounts or inventory, [Borrower's] payment intangibles, chattel paper, instruments and documents, (iv) to the extent held in a segregated deposit account, cash proceeds of [Borrower's] Inventory/Service Accounts and inventory, and (v) proceeds of insurance policies covering [Borrower's] Inventory/Service Accounts and inventory received with respect to such accounts and inventory; *provided* that , for purposes of clarification, notwithstanding the foregoing, in no event shall "A/R Facility Senior Collateral" include any right, title or interest of any Obligor in (A) any Intellectual Property or any licenses thereof, (B) any accounts or proceeds arising from the sale, transfer, licensing or other disposition of any Intellectual Property or licenses, or from the sale, transfer, lease or other disposition of equipment (collectively, " ***IP/Equipment Accounts*** "), (C) equipment, (D) to the extent evidencing, governing, securing or otherwise related to equipment, any general intangibles, chattel paper, instruments or documents or (E) proceeds of equipment or proceeds of insurance policies with respect to equipment.

" ***Bankruptcy Code*** " means the federal bankruptcy law of the United States as from time to time in effect, currently as Title 11 of the United States Code. Section references to current sections of the Bankruptcy Code shall refer to comparable sections of any revised version thereof if section numbering is changed.



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

" ***Claim*** " means, (i) in the case of [A/R Lender], any and all present and future "claims" (used in its broadest sense, as contemplated by and defined in Section 101(5) of the Bankruptcy Code, but without regard to whether such claim would be disallowed under the Bankruptcy Code) of [A/R Lender] now or hereafter arising or existing under or relating to the A/R Facility Documents (with the portion of [A/R Lender]'s Claim at any time consisting of the aggregate principal amount of indebtedness under the A/R Facility Documents not to exceed the lesser of $[_____] and 80% of the face amount at such time of [Borrower's] eligible Inventory/Service Accounts (as defined in the A/R Facility Agreement as of the date hereof), whether joint, several, or joint and several, whether fixed or indeterminate, due or not yet due, contingent or non-contingent, matured or unmatured, liquidated or unliquidated, or disputed or undisputed, whether under a guaranty or a letter of credit, and whether arising under contract, in tort, by law, or otherwise, any interest or fees thereon (including interest or fees that accrue after the filing of a petition by or against any Obligor under the Bankruptcy Code, irrespective of whether allowable under the Bankruptcy Code), any costs of Enforcement Actions, including reasonable attorneys' fees and costs, and any prepayment or termination fees, and (ii) in the case of CRG Creditors, any and all present and future "claims" (used in its broadest sense, as contemplated by and defined in Section 101(5) of the Bankruptcy Code, but without regard to whether such claim would be disallowed under the Bankruptcy Code) of CRG Creditors now or hereafter arising or existing under or relating to the CRG Documents, whether joint, several, or joint and several, whether fixed or indeterminate, due or not yet due, contingent or non-contingent, matured or unmatured, liquidated or unliquidated, or disputed or undisputed, whether under a guaranty or a letter of credit, and whether arising under contract, in tort, by law, or otherwise, any interest or fees thereon (including interest or fees that accrue after the filing of a petition by or against any Obligor under the Bankruptcy Code, irrespective of whether allowable under the Bankruptcy Code), any costs of Enforcement Actions, including reasonable attorneys' fees and costs, and any prepayment or termination fees.

" ***Collateral*** " means all real or personal property of any Obligor in which any Creditor now or hereafter has a security interest.

" ***Common Collateral*** " means all Collateral in which both [A/R Lender] and CRG Agent have a security interest.

" ***CRG Documents*** " means all documentation related to the CRG Credit Agreement and all Loan Documents (as defined in the CRG Credit Agreement), including security or pledge agreements and all other related agreements.

" ***CRG Senior Collateral*** " means all Collateral in which CRG Agent has a security interest, other than the A/R Facility Senior Collateral, including, for the avoidance of doubt and without limitation, any additional Collateral in which CRG Agent may have a security interest following the commencement of or in connection with any Insolvency Proceeding, including without limitation Collateral subject to any CRG Agent security interests, superpriority claims, or other rights arising under Sections 507(b) and 552 of the Bankruptcy Code.

" ***Credit Documents*** " means, collectively, the CRG Documents and the A/R Facility Documents.

" ***Enforcement Action*** " means, with respect to any Creditor and with respect to any Claim of such Creditor or any item of Collateral in which such Creditor has or claims a security interest, lien, or right of offset, (i) any action, whether judicial or nonjudicial, to repossess, collect, offset, recoup, give notification to third parties with respect to, sell, dispose of, foreclose upon, give notice of sale, disposition, or foreclosure with respect to, or obtain equitable or injunctive relief with respect to, such Claim or Collateral, (ii) any action in connection with any Insolvency Proceeding to protect, defend, enforce or assert rights with respect to such Claim or Collateral, including without limitation filing and defending any proof of claim, opposing or joining in the opposition of any sale of assets or confirmation of a plan of reorganization, or opposing or joining in the opposition of any proposed debtor-in-possession loan or use of cash collateral, and (iii) the filing of, or the joining in the filing of, an involuntary bankruptcy or insolvency proceeding against any Obligor.

" ***Intellectual Property*** " means, collectively, all copyrights, copyright registrations and applications for copyright registrations, including all renewals and extensions thereof, all rights to recover for past, present or future infringements thereof and all other rights whatsoever accruing thereunder or pertaining thereto (collectively, " ***Copyrights*** "), all patents and patent applications, including the inventions and improvements described and claimed therein together with the reissues, divisions, continuations, renewals, extensions and continuations in part thereof, all damages and payments for past or future infringements thereof and rights to sue therefor, and all rights corresponding thereto throughout the world and all income, royalties, damages and payments now or hereafter due and/or payable under or with respect thereto (collectively, " ***Patents*** "), and all trade names, trademarks and service marks, logos, trademark and service mark registrations, and applications for trademark and service mark registrations, including all renewals of trademark and service mark registrations, all rights to recover for all past, present and future infringements thereof and all rights to sue therefor, and all rights corresponding thereto throughout the world (collectively, " ***Trademarks*** "), together, in each case,

with the product lines and goodwill of the business connected with the use of, and symbolized by, each such trade name, trademark and service mark, together with (a) all inventions, processes, production methods, proprietary information, know-how and trade secrets; (b) all licenses or user or other agreements granted to any Obligor with respect to any of the foregoing, in each case whether now or hereafter owned or used; (c) all information, customer lists, identification of suppliers, data, plans, blueprints, specifications, designs, drawings, recorded knowledge, surveys, engineering reports, test reports, manuals, materials standards, processing standards, performance standards, catalogs, computer and automatic machinery software and programs; (d) all field repair data, sales data and other information relating to sales or service of products now or hereafter manufactured; (e) all accounting information and all media in which or on which any information or knowledge or data or records may be recorded or stored and all computer programs used for the compilation or printout of such information, knowledge, records or data; (f) all licenses, consents, permits, variances, certifications and approvals of governmental agencies now or hereafter held by any Obligor; and (g) all causes of action, claims and warranties now or hereafter owned or acquired by any Obligor in respect of any of the items listed above.

" ***Junior Collateral*** " means, (i) in the case of [A/R Lender], all Common Collateral consisting of CRG Senior Collateral and (ii) in the case of CRG Creditors, all Common Collateral consisting of A/R Facility Senior Collateral.

" ***Obligor*** " means Borrower, each subsidiary thereof and each other person or entity that provides a guaranty of, or collateral for, any Claim of any Creditor.

" ***Proceeds Sweep Period*** " means the period beginning on the later to occur of (i) the occurrence of an event of default under any Creditor's Credit Documents and (ii) receipt by the other Creditor of written notice from such Creditor of such event of default, and ending on the date on which such event of default shall have been waived in writing by the Creditor issuing such notice.

" ***Senior Collateral*** " means, (i) in the case of [A/R Lender], all A/R Facility Senior Collateral and (ii) in the case of CRG Creditors, all CRG Senior Collateral.

" ***UCC*** " means the Uniform Commercial Code of any applicable jurisdiction and, if the applicable jurisdiction shall not have any Uniform Commercial Code, the Uniform Commercial Code as in effect in the State of New York. The following terms have the meanings given to them in the applicable UCC: "account", "chattel paper", "commodity account", "deposit account", "document", "equipment", "general intangible", "instrument", "inventory", "proceeds" and "securities account".

**2. Lien Subordination** . (a) Notwithstanding the respective dates of attachment or perfection of the security interests of CRG Creditors and the security interests of [A/R Lender], or any contrary provision of the UCC, or any applicable law or decision, or the provisions of the Credit Documents, and irrespective of whether [A/R Lender] or any CRG Creditor holds possession of all or any part of the Collateral, (i) all now existing and hereafter arising security interests of [A/R Lender] in any A/R Facility Senior Collateral shall at all times be senior to the security interests of CRG Creditors in such A/R Facility Senior Collateral, and (ii) all now existing and hereafter arising security interests of CRG Creditors in any CRG Senior Collateral shall at all times be senior to any interests, including the security interests of [A/R Lender] in such CRG Senior Collateral. Notwithstanding the foregoing, [A/R Lender] agrees and acknowledges that it shall not receive, and [neither Borrower nor any Obligor shall grant][Borrower shall not grant], any security interest to [A/R Lender] in the CRG Senior Collateral.

(b) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors:

(i) acknowledges and consents to (A) [Borrower][each Obligor] granting to the other Creditor a security interest in the Common Collateral of such other Creditor, (B) the other Creditor filing any and all financing statements and other documents as reasonably deemed necessary by the other Creditor in order to perfect its security interest in its Common Collateral, and (C) [Borrower's][each Obligor's] entry into the Credit Documents to which the other Creditor is a party.

(ii) acknowledges, agrees and covenants, notwithstanding **Section 2(c)** but subject to **Section 5** , that it shall not contest, challenge or dispute the validity, attachment, perfection, priority or enforceability of the other Creditor's security interest in the Common Collateral, or the validity, priority or enforceability of the other Creditor's Claim. For the avoidance of doubt and notwithstanding anything in this Agreement to the contrary, [A/R Lender] shall not file or join in any motion or pleading in connection with any Insolvency Proceeding or take any other action seeking to recharacterize any Intellectual Property, the proceeds thereof, or any other CRG Senior Collateral or proceeds thereof as A/R Facility Senior Collateral.

(c) Subject to **Section 2(b)(ii)** , the priorities provided for herein with respect to security interests and liens are applicable only to the extent that such security interests and liens are enforceable, perfected and have not been avoided; if a security

interest or lien is judicially determined to be unenforceable or unperfected or is judicially avoided with respect to one or more Claims or any part thereof, the priorities provided for herein shall not be available to such security interest or lien to the extent that it is avoided or determined to be unenforceable. Nothing in this **Section 2(c)** affects the operation of any turnover of payment provisions hereof, or of any other agreements among any of the parties hereto.

**3. Distribution of Proceeds of Common Collateral** . (a) During each Proceeds Sweep Period, all proceeds including proceeds of any sale, exchange, collection, or other disposition of:

(i) A/R Facility Senior Collateral shall be distributed first, to [A/R Lender], in an amount up to the amount of [A/R Lender]'s Claim; then, to CRG Agent, in an amount up to the amount of CRG Creditors' Claim;

(ii) CRG Senior Collateral shall be distributed first, to CRG Agent, in an amount up to the amount of CRG Creditors' Claim; then, to [A/R Lender], in an amount up to the amount of [A/R Lender]'s Claim.

(b) In the event that, notwithstanding **Section 3(a)** , any Creditor shall during any Proceeds Sweep Period receive any payment, distribution, security or proceeds constituting its Junior Collateral prior to the indefeasible payment in full of the other set of Creditors' Claims and termination of all commitments of the other set of Creditors under their Credit Documents, such Creditor shall hold in trust, for such other Creditor, such payment, distribution, security or proceeds, and shall deliver to such other Creditor, in the form received (with any necessary endorsements or as a court of competent jurisdiction may otherwise direct) such payment, distribution, security or proceeds for application to the other set of Creditors' Claims in accordance with **Section 3(a)** .

(c) At all times other than during a Proceeds Sweep Period, all proceeds including proceeds of any sale, exchange, collection, or other disposition of Collateral shall be distributed or applied, as applicable, in accordance with the CRG Documents and the A/R Facility Documents.

(d) Except as expressly set forth herein, nothing in this **Section 3** shall obligate any Creditor (i) to sell, exchange, collect or otherwise dispose of Collateral at any time, or (ii) to take any action in violation of any stay imposed in connection with any Insolvency Proceeding, including without limitation the automatic stay in Section 362(a) of the Bankruptcy Code, nor shall any Creditor have any liability to the other arising from or in connection with such Creditor's failure to take such action.

**4. Subordination of Remedies** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors (such Person for purposes of this **Section 4** , the " ***Junior Creditor*** "), agrees, subject to **Section 5** , that, (i) unless and until all Claims of the other set of Creditors (for purposes of this **Section 4** , the " ***Senior Creditor*** ") have been indefeasibly paid in full and all commitments of the Senior Creditor under its Credit Documents have been terminated, or (ii) until the expiration of a period of 180 days from the date of notice of default under the Senior Creditor's Credit Documents given by the Senior Creditor to the Junior Creditor, whichever is earlier, and whether or not any Insolvency Proceeding has been commenced by or against any Obligor, the Junior Creditor shall not, without the prior written consent of the Senior Creditor, enforce, or attempt to enforce, any rights or remedies under or with respect to any of such Junior Creditor's Junior Collateral, including causing or compelling the pledge or delivery of such Junior Collateral, any attachment of, levy upon, execution against, foreclosure upon or the taking of other action against or institution of other proceedings with respect to any such Junior Collateral, notifying any account debtors of any Obligor, asserting any claim or interest in any insurance with respect to such Junior Collateral, or exercising any rights under any lockbox agreement, account control agreement, landlord waiver or bailee's letter or similar agreement or arrangement with respect to such Junior Collateral, or institute or commence, or join with any person or entity in commencing, any action or proceeding with respect to such rights or remedies (including any action of foreclosure, enforcement, collection or execution and any Insolvency Proceeding involving any Obligor), except that notwithstanding the foregoing, at all times, including during a Proceeds Sweep Period, the Junior Creditor shall be able to exercise its rights under a lockbox agreement or an account control agreement with respect to any deposit account, securities account or commodity account constituting Collateral, including its rights to freeze such account or exercise any rights of offset; *provided* that any distribution or withdrawal from such account shall be applied in accordance with **Section 3(a)** .

**5. Insolvency Proceedings** . (a) **Rights Continue** . In the event of any Obligor's insolvency, reorganization or any case, action or proceeding, commenced by or against such Obligor, under any bankruptcy or insolvency law or laws relating to the relief of debtors, including, without limitation, any voluntary or involuntary bankruptcy (including any case commenced under the Bankruptcy Code), insolvency, receivership, liquidation, dissolution, winding-up or other similar statutory or common law proceeding or arrangement involving any Obligor, the readjustment of its liabilities, any assignment for the benefit of its creditors, or any marshalling of its assets or liabilities (each, an " ***Insolvency Proceeding*** "), (i) this Agreement shall remain in full force and effect in accordance with Section 510(a) of the United States Bankruptcy Code, and (ii) the Collateral shall include, without limitation, all

Collateral arising during or after any such Insolvency Proceeding (which Collateral shall be subject to the priorities set forth in this Agreement).

(b) **Proof of Claim, Sales and Plans** . At any meeting of creditors or in the event of any Insolvency Proceeding, each Creditor shall retain the right to vote, file a proof of claim and otherwise act with respect to its Claims (including the right to vote to accept or reject any plan of partial or complete liquidation, reorganization, arrangement, composition, or extension (a " ***Plan*** ")); *provided* that (i) no Creditor shall initiate, prosecute or participate in any claim or action in such Insolvency Proceeding directly or indirectly challenging the enforceability, validity, perfection or priority of the other set of Creditors' Claims, this Agreement, the Credit Documents, or any liens securing the other set of Creditors' Claims; and (ii) no Creditor shall propose any Plan or file or join in any motion or pleading in support of any motion or Plan or exercise any other voting rights unless such Plan provides for the treatment of the Creditors' claims in accordance with the terms of **Section 5(g)** and otherwise consistent with the terms of this Agreement, or that would otherwise impair the timely repayment of the other set of Creditors' Claims in accordance with its terms or impair or impede any rights of the other set of Creditors.

(c) **Finance and Sale Issues** . (i) If any Obligor shall be subject to any Insolvency Proceeding and a Creditor shall desire to permit the use by such Obligor of cash collateral (as defined in Section 363(a) of the Bankruptcy Code, " ***Cash Collateral*** ") constituting such Creditor's Senior Collateral or to permit any Obligor to obtain financing (including on a priming basis with respect to such Creditor's Senior Collateral), whether from such Creditor or any other third party under Section 362, 363 or 364 of the Bankruptcy Code or any other applicable law (each, a " ***Post-Petition Financing*** "), then the other set of Creditors shall not oppose or raise any objection to or contest (or join with or support any third party opposing, objecting to or contesting), such use of Cash Collateral or Post-Petition Financing and shall not request adequate protection or any other relief in connection therewith (except as specifically permitted under **Section 5(e)** ); *provided, however,* that, notwithstanding the foregoing, each Creditor shall be entitled to oppose, raise objection to, or contest (or join with or support any third party opposing, objecting to, or contesting) any such use of Cash Collateral or Post-Petition Financing if such proposed use of Cash Collateral or Post-Petition Financing would result in any liens on such Creditor's Senior Collateral to be subordinated to or *pari passu* with such Cash Collateral or Post-Petition Financing.

(ii) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that it shall raise no objection to, and shall not oppose or contest (or join with or support any third party opposing, objecting to or contesting), a sale, revesting or other disposition of any Collateral constituting its Junior Collateral free and clear of its liens or other Claims, whether under Sections 363 or 1141 of the Bankruptcy Code or other applicable law, if the other set of Creditors has consented to such sale or disposition of such assets; *provided, however,* that, notwithstanding the foregoing and for the avoidance of doubt, any Creditor shall be entitled to oppose, raise objection to, or contest (or join with or support any third party opposing, objecting to, or contesting) any sale, revesting or other disposition of any Collateral constituting its Senior Collateral free and clear of its liens or other Claims.

(d) **Relief from the Automatic Stay** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that, until the other set of Creditors' Claims have been indefeasibly paid in full, such Creditor shall not seek relief, pursuant to Section 362(d) of the Bankruptcy Code or otherwise, from the automatic stay of Section 362(a) of the Bankruptcy Code or from any other stay in any Insolvency Proceeding in respect of its Junior Collateral without the prior written consent of such other Creditor.

(e) **Adequate Protection** . [A/R Lender] agrees that it shall not:

(i) oppose, object to or contest (or join with or support any third party opposing, objecting to or contesting) (A) any request by CRG Agent for adequate protection in any Insolvency Proceeding (or any granting of such request), or (B) any objection by CRG Agent to any motion, relief, action or proceeding based on such Senior Creditor claiming a lack of adequate protection; or

(ii) seek or accept any form of adequate protection under any of Sections 362, 363 and/or 364 of the Bankruptcy Code with respect to the Collateral, except to the extent that, in the sole discretion of CRG Agent, the receipt by [A/R Lender] of any such adequate protection would not reduce (or would not have the effect of reducing) or adversely affect the adequate protection that CRG Creditors otherwise would be entitled to receive, it being understood that, in any event, (y) no adequate protection shall be requested or accepted by [A/R Lender] unless CRG Agent is satisfied in its sole discretion with the adequate protection afforded to CRG Creditors, and (z) any such adequate protection is in the form of a replacement lien on the Obligors' assets, which lien shall be subordinated to the liens securing CRG Creditors' Claims (including any replacement liens granted in respect of CRG Creditors' Claims) and any Post-Petition Financing (and all obligations relating thereto) on the same basis as the other liens securing [A/R Lender]'s Claims are so subordinated to the liens securing CRG Creditors' Claims as set forth in this Agreement.

(f) **Post-Petition Interest** . Each Creditor shall not oppose or seek to challenge any claim by the other set of Creditors for allowance in any Insolvency Proceeding of Claims consisting of post-petition interest, fees or expenses; *provided* that the treatment of such Claims are consistent with the Creditors' relative priorities set forth in this Agreement.

(g) **Separate Class** . Without limiting anything to the contrary contained herein or in the Credit Documents, each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, acknowledges and agrees that (i) the grants of liens pursuant to the CRG Documents and the A/R Facility Documents constitute two separate and distinct grants of liens, and (ii) because of, among other things, their differing rights in the Collateral, each set of Creditors' Claims are fundamentally different from the other's Claims and must be separately classified in any Plan proposed or adopted in an Insolvency Proceeding. To further effectuate the intent of the parties as provided in the immediately preceding sentence, if it is held that the respective Claims of the Creditors in respect of the Collateral constitute only one secured claim (rather than separate classes of senior and junior secured claims), then each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, acknowledges and agrees (x) that all distributions shall be made as if there were separate classes of senior and junior secured claims against the Obligors in respect of the Collateral, and (y) to turn over to the other Creditor amounts otherwise received or receivable by it in the manner described in **Section 3(b)** to the extent necessary to effectuate the intent of this sentence.

(h) **Waiver** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, waives any claim it may hereafter have against the other set of Creditors arising out of the election by such other set of Creditors of the application to the claims of such other set of Creditors of Section 1111(b)(2) of the Bankruptcy Code, and/or out of any Cash Collateral or Post-Petition Financing arrangement or out of any grant of a lien in connection with the Collateral in any Insolvency Proceeding.

**6.** **Notice of Default** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, shall give to the other prompt written notice of the occurrence of any default or event of default (which has not been promptly waived or cured) under any of its Credit Documents of which it has knowledge (and any subsequent cure or waiver thereof) and shall, simultaneously with giving any notice of default or acceleration to Borrower, provide to such other Creditor a copy of such notice of default. [A/R Lender] acknowledges and agrees that any event of default under the A/R Facility Documents shall be deemed to be an event of default under the CRG Documents. For the avoidance of doubt, nothing in this **Section 6** shall obligate any Creditor to provide any notice in violation of any stay imposed in connection with any Insolvency Proceeding, including without limitation the automatic stay in Section 362(a) of the Bankruptcy Code, nor shall any Creditor have any liability to the other arising from or in connection with such Creditor's failure to take such action.

**7.** **Release of Liens** . In the event of any private or public sale or other disposition, by or with the consent of [A/R Lender] and CRG Agent, on behalf of CRG Creditors (such Person, for purposes of this **Section 7** , the " ***Senior Creditor*** "), of all or any portion of such set of Creditors' Senior Collateral, CRG Agent, on behalf of CRG Creditors, and [A/R Lender], respectively (for purposes of this **Section 7** , the " ***Junior Creditor*** "), agrees that such sale or disposition shall be free and clear of such Junior Creditor's liens; *provided* that such sale or disposition is made in accordance with the UCC or applicable provisions of the Bankruptcy Code, including without limitation Sections 363(f) or 1141(c) of the Bankruptcy Code. The Junior Creditor agrees that, in connection with any such sale or other disposition, (i) the Senior Creditor is authorized to file any and all UCC and other applicable lien releases and/or terminations in respect of the liens held by the Junior Creditor in connection with such a sale or other disposition, and (ii) it shall execute any and all lien releases or other documents reasonably requested by the Senior Creditor in connection therewith.

**8.** **Attorney-In-Fact** . Until the CRG Creditors' Claims have been fully paid in cash and the CRG Creditors' arrangements to lend any funds to the Obligors have been terminated, [A/R Lender] irrevocably appoints CRG Agent as [A/R Lender]'s attorney-in-fact, and grants to CRG Agent a power of attorney with full power of substitution (which power of attorney is coupled with an interest), in the name of [A/R Lender] or in the name of CRG Agent, for the use and benefit of CRG Agent, without notice to [A/R Lender], to perform at CRG Agent's option the following acts in any bankruptcy, insolvency or similar proceeding involving Borrower:

(a) To file the appropriate claim or claims in respect of the [A/R Lender] Claims on behalf of [A/R Lender] if [A/R Lender] does not do so prior to 30 days before the expiration of the time to file claims in such proceeding and if CRG Agent elects, in its sole discretion, to file such claim or claims; and

(b) To accept or reject any plan of reorganization or arrangement on behalf of [A/R Lender] and to otherwise vote [A/R Lender]'s claims in respect of any [A/R Lender] Claim in any manner that CRG Agent deems appropriate for the enforcement of its rights hereunder.

**9.** **Agent for Perfection** . [A/R Lender] acknowledges that applicable provisions of the UCC may require, in order to properly perfect CRG Creditors' security interest in the Common Collateral securing the CRG Creditors' Claims, that CRG Agent possess certain of such Common Collateral, and may require the execution of control agreements in favor of CRG Agent concerning such Common Collateral. In order to help ensure that CRG Creditors' security interest in such Common Collateral is properly perfected (but subject to and without waiving the other provisions of this Agreement), [A/R Lender] agrees to hold both for itself and, solely for the purposes of perfection and without incurring any duties or obligations to CRG Creditors as a result thereof or with respect thereto, for the benefit of CRG Creditors, any such Common Collateral, and agrees that CRG Creditors' lien in such Common Collateral shall be deemed perfected in accordance with applicable law

**10.** **Credit Documents** . (a) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, represents and warrants that it has provided to the other true, correct and complete copies of all Credit Documents which relate to its credit agreement.

(b) At any time and from time to time, without notice to the other set of Creditors, each Creditor may take such actions with respect to its Claims as such Creditor, in its sole discretion, may deem appropriate, including, without limitation, terminating advances under its Credit Documents, increasing the principal amount, extending the time of payment, increasing applicable interest to the default rate, renewing, compromising or otherwise amending the terms of any documents affecting its Claims and any Collateral therefor, and enforcing or failing to enforce any rights against Borrower or any other person, and no such action or inaction described in this sentence shall impair or otherwise affect such Creditor's rights hereunder; *provided, however,* that (i) no Creditor shall take any action that is inconsistent with the provisions of this Agreement, and (ii) [A/R Lender] shall not increase the portion of [A/R Lender]'s Claim consisting of principal to an amount in excess of $[_____] without the prior written consent of CRG Agent. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, waives the benefits, if any, of any statutory or common law rule that may permit a subordinating creditor to assert any defenses of a surety or guarantor, or that may give the subordinating creditor the right to require a senior creditor to marshal assets, and each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that it shall not assert any such defenses or rights.

(c) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that any other Creditor may release or refrain from enforcing its security interest in the Collateral, or permit the use or consumption of such Collateral by any Obligor free of the other Creditor's security interest, without incurring any liability to any other Creditor.

**11.** **Waiver of Right to Require Marshaling** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, expressly waives any right that it otherwise might have to require any other Creditor to marshal assets or to resort to Collateral in any particular order or manner, whether provided for by common law or statute. No Creditor shall be required to enforce any guaranty or any security interest or lien given by any person or entity as a condition precedent or concurrent to the taking of any Enforcement Action with respect to the Collateral.

**12.** **Representations and Warranties** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, represents and warrants to the other that:

(a) all action on the part of such Creditor, its officers, directors, partners, members and shareholders, as applicable, necessary for the authorization of this Agreement and the performance of all obligations of such Creditor hereunder has been taken;

(b) this Agreement constitutes the legal, valid and binding obligation of such Creditor, enforceable against such Creditor in accordance with its terms;

(c) the execution, delivery and performance of and compliance with this Agreement by such Creditor will not (i) result in any material violation or default of any term of any of such Creditor's charter, formation or other organizational documents (such as Articles or Certificate of Incorporation, bylaws, partnership agreement, operating agreement, etc.) or (ii) violate any material applicable law, rule or regulation.

**13.** **Disgorgement** . (a) If, at any time after payment in full of the [A/R Lender] Claims any payments of the [A/R Lender] Claims must be disgorged by [A/R Lender] for any reason (including, without limitation, any Insolvency Proceeding), this Agreement and the relative rights and priorities set forth herein shall be reinstated as to all such disgorged payments as though such payments had not been made and CRG Creditors shall immediately pay over to [A/R Lender] all money or funds received or retained by CRG Creditors with respect to the CRG Creditors' Claims to the extent that such receipt or retention would have been prohibited hereunder.

(b) If, at any time after payment in full of the CRG Creditors' Claims any payments of the CRG Creditors' Claims must be disgorged by any CRG Creditor for any reason (including, without limitation, any Insolvency Proceeding), this Agreement and the relative rights and priorities set forth herein shall be reinstated as to all such disgorged payments as though such payments had not been made and [A/R Lender] shall immediately pay over to CRG Agent all money or funds received or retained by [A/R Lender] with respect to the [A/R Lender] Claims to the extent that such receipt or retention would have been prohibited hereunder.

**14.** **Successors and Assigns** . This Agreement shall bind any successors or assignees of each Creditor. This Agreement shall remain effective until all Claims are indefeasibly paid or otherwise satisfied in full and [A/R Lender] and the CRG Creditors have no commitment to extend credit under the Credit Documents. This Agreement is solely for the benefit of the Creditors and not for the benefit of Borrower or any other party. Each Creditor shall not sell, assign, pledge, dispose of or otherwise transfer all or any portion of its Claims or any of its Credit Documents or any interest in any Common Collateral unless, prior to the consummation of any such action, the transferee thereof shall execute and deliver to the other set of Creditors an agreement of such transferee to be bound hereby, or an agreement substantially identical to this Agreement providing for the continued subjection of such Claims, the interests of the transferee in the Collateral and the remedies of the transferee with respect thereto as provided herein with respect to the transferring Creditor and for the continued effectiveness of all of the other rights of the other Creditor arising under this Agreement, in each case in form satisfactory to the other set of Creditors.

**15.** **Further Assurances** . Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees to execute such documents and/or take such further action as the other Creditor may at any time or times reasonably request in order to carry out the provisions and intent of this Agreement, including, without limitation, ratifications and confirmations of this Agreement from time to time hereafter, as and when requested by the other Creditor.

**16.** **Counterparts** . This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

**17.** **Governing Law; Waiver of Jury Trial** . (a) This Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction.

(b) EACH CREDITOR WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN.

**18.** **Entire Agreement** . This Agreement represents the entire agreement with respect to the subject matter hereof, and supersedes all prior negotiations, agreements and commitments. Each Creditor is not relying on any representations by the other Creditor, Borrower or any other Obligor in entering into this Agreement, and each Creditor has kept and will continue to keep itself fully apprised of the financial and other condition of each Obligor. This Agreement may be amended only by written instrument signed by the Creditors.

**19.** **Relationship among Creditors** . The relationship among the Creditors is, and at all times shall remain solely that of creditors of Obligors. Creditors shall not under any circumstances be construed to be partners or joint venturers of one another; nor shall the Creditors under any circumstances be deemed to be in a relationship of confidence or trust or a fiduciary relationship with one another, or to owe any fiduciary duty to one another. Creditors do not undertake or assume any responsibility or duty to one another to select, review, inspect, supervise, pass judgment upon or otherwise inform each other of any matter in connection with any Obligor's property, any Collateral held by any Creditor or the operations of any Obligor. Each Creditor shall rely entirely on its own judgment with respect to such matters, and any review, inspection, supervision, exercise of judgment or supply of information undertaken or assumed by any Creditor in connection with such matters is solely for the protection of such Creditor.

**20.** **No Modification** . Notwithstanding anything contained herein, no provision of this Agreement shall be deemed to waive, amend, limit or otherwise modify any term or condition of the CRG Credit Agreement and the A/R Facility Documents.

**21.** **Severability** . Any provision of this Agreement which is illegal, invalid, prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent such illegality, invalidity, prohibition or unenforceability without invalidating or impairing the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction.

**22.** **Notices** . All notices, demands, instructions and other communications required or permitted to be given to or made upon any party hereto shall be in writing and shall be delivered or sent by first-class mail, postage prepaid, or by overnight courier or messenger service or by facsimile, message confirmed, and shall be deemed to be effective for purposes of this Agreement on the day that delivery is made or refused. Unless otherwise specified in a notice mailed or delivered in accordance with the foregoing sentence, notices, demands, instructions and other communications in writing shall be given to or made upon the respective parties hereto at their respective addresses and facsimile numbers indicated on the signature pages hereto.

[Signature pages follow]



[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the undersigned have executed this Intercreditor Agreement as of the date first above written.

**[A/R Lender]:**

[INSERT NAME OF A/R LENDER]

By _____
Name: [_____ ]
Title: [_____ ]

Address for Notices:

[_____ ]
[_____ ]
[_____ ]

Tel.: [_____ ]
Email: [_____ ]

**CRG AGENT:**

CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: General Counsel
Tel.: 713.209.7350
Fax: 713.209.7351
Email: adorenbaum@crglp.com

Acknowledged and Agreed to:

**BORROWER:**

T2 BIOSYSTEMS, INC.

By: /s/ John McDonough
Name: John McDonough
Title: Chief Executive Officer

Address for Notices:
[_____]
[_____]
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]

Exhibit G-11

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**EXHIBIT 10.35**

March 7, 2016

Alec Barclay
700 1st Street, Apt. 3G
Hoboken, NJ 07030

Dear Alec:

On behalf of T2 Biosystems, Inc., (the "Company") I am delighted to make this offer of employment to you to join us in the role of Senior Director, Program Management for the Company beginning on April 18, 2016.

At T2 Biosystems, our mission is to lower mortality rates, improve patient outcomes and reduce the cost of healthcare by empowering medical professionals to make targeted therapeutic treatment decisions earlier. To this end, you are joining us at a very exciting stage in our development as a Company! In September 2014, we received FDA clearance to sell our first two products, the T2Dx Instrument and T2Candida Panel, which provide sensitive detection of specific sepsis-causing pathogens directly from a whole blood specimen in 3-5 hours versus 2-5 days for competitive detection systems. Published data has demonstrated that this improvement in time to detection may reduce the current mortality rate of 40% for those infections to 11%. We are truly excited to bring this product to market.

This speed and detection capability is made possible by our proprietary magnetic resonance-based diagnostic technology platform, called T2MR, which has been in development since our inception in 2006. Our next two clinical applications for our T2MR technology will target bacterial sepsis and hemostasis, areas of significant unmet medical need where existing therapies could be more effective with improved diagnostics.

Alec, we are excited to extend this offer of employment to you. We think you can help us fulfill our mission and we believe you'd be a great fit for our team. To kick things off, you will find all of the pertinent information related to our offer of employment in the attached pages. Please read the offer carefully and, if it is acceptable, sign and return one copy to my attention (PDF copy is fine).

If you have any questions, please do not hesitate to contact me at (781) 457-1220 or email at jmcdonough@t2biosystems.com. We are looking forward to having you on our team!

Sincerely,

/s/ John McDonough

John McDonough
Chief Executive Officer

Active: 2016

**OFFER OF EMPLOYMENT**

Date of employment: Should you accept the terms of this offer, your employment with the Company will commence on April 18, 2016.

Background check: Your employment is contingent upon your successful completion of a background check, which is required for all employees of the Company. The Company will forward you the appropriate documents, and such documents shall be required to be submitted to the Company by no later than one week prior to your start date.

Position: You have been offered the position of Senior Director, Program Management. In this capacity, you will initially report to John McDonough, Chief Executive Officer. Your duties and responsibilities will include all those customarily attendant to such a position, and any other such duties or responsibilities that John McDonough or the Company may, from time to time, assign to you. You agree that you shall not enter into any employment endeavors which may conflict with your ability to devote the necessary time and energies to the Company's business interest while engaged by the Company. You further agree to comply with all applicable laws and with all Company rules and policies established by the Company from time to time.

Compensation and Tax Matters: Your salary shall be $9,166.67 (the equivalent of $220,000 when annualized), payable semi-monthly and subject to pro-ration for any partial initial or terminal week during which you are employed, in accordance with normal payroll practices and schedule of the Company.

You will be eligible for an annual bonus of up to 15% of your annualized base salary based on corporate and personal objectives to be determined. The bonus will be pro-rated based on your start date and paid at the sole discretion of the Company. *If your start date is on or after July 1, 2016, you will not be eligible for a performance bonus for 2016.*

Additionally, the Company will provide you with a sign-on bonus of $20,000.00 to be paid upon completion of sixty (60) days of continued employment from your start date. Should you voluntarily leave the Company prior to twelve (12) months from the date of payment, or should the Company terminate your employment for cause, you agree you must refund to the Company the entire sign-on bonus that was paid to you. If you voluntarily leave the Company more than twelve (12) months from the date of payment, but prior to twenty-four (24) months from the date of payment, you agree you must refund a pro rata portion of the bonus that was paid to you. You further agree that the Company may deduct any such amounts remaining at the time of termination from amounts the Company owes you.

All compensation amounts stated are before any deductions for FICA taxes, state and federal withholding taxes and other payroll deductions required to be made by the Company under applicable law.

Stock Options: Subject to the approval of the Board of Directors and your execution of the Company's Stock Option Agreement, you will be offered 15,000 shares of T2 Biosystems common stock options under the Company's 2014 Incentive Award Plan. The exercise price of the options will be equal to their fair market value on the date of grant as determined by the Board of Directors. The stock options will have a 4-year vesting schedule with 25% of the options vesting one year from the vesting commencement date (your start date) and remaining options vesting in equal monthly installments for the following 36 months. The terms and conditions of such stock option grant will be more fully described in the Company's Amended and Restated Stock Plan.

Active: 2016

Fringe Benefits: You will have the opportunity to participate in the Company's fringe benefits program. Currently, these fringe benefits are as follows:

- The Company currently provides contributions toward a medical and dental plan for yourself and immediate family members
- Three (3) weeks paid vacation, Company designated holidays, personal holidays and sick days (see Benefits Summary for more information).
- The Company provides 100% contribution towards Term Life Insurance, Accidental Death and Dismemberment Insurance, and Short and Long-Term Disability Insurance;
- The opportunity to enroll in the Company's 401(k) Investment and Section 125 Plans based on plan eligibility requirements; and
- Pay or reimburse you in accordance with the Company's reimbursement policies from time to time in connection with the performance of your duties for the Company subject to your submission of satisfactory documentation with respect thereto.

The Company reserves the right to amend, delete or change any of its employment policies and/or benefits at any time in its sole discretion.

Non Competition/Non-Disclosure/Invention Assignment Agreement: No later than on the first day of your employment with the Company you will be required to sign the enclosed Non-Competition/Non-Disclosure/Inventions Assignment Agreement ("Obligations Agreement") which includes nondisclosure, inventions ownership, and other provisions that are necessary to protect the Company's confidential information, intellectual; property, trade secrets, and customer relationships. As you may be given access to such protectable interests, your employment is contingent upon your signing the Obligations Agreement. The terms of the Obligations Agreement will survive termination, for whatever reason, of the employment relationship.

Prior Agreements: You acknowledge and confirm that you have provided/disclosed to the Company all restrictive covenants and agreements, including nondisclosure and confidentiality agreements, to which you are a party. You agree that you shall not disclose to the Company or use while an employee of the Company any confidential or trade secret information obtained by you from other persons or employers and shall not bring any property upon the Company premises which has been misappropriated by others. You also acknowledge that the Company expects you to honor any prior obligations to former employers to which you remain bound.

Employment At Will: Although you are being hired as an employee commencing on or about April 18, 2016, your employment with the Company shall be at will. This means that your employment is not guaranteed for any definite period of time, and you or the Company may terminate your employment relationship with or without notice at any time and for any or no reason or cause. The Company is not bound to follow any policy, procedure, or process in connection with employee discipline, employment termination or otherwise.

Entire Agreement: This letter (together with the attached Obligations Agreement) sets forth the entire understanding between the Company and yourself with respect to your employment by the Company.

Active: 2016

All prior discussions, negotiations, correspondence and other understandings between you and the Company are superseded, and there are no representations, warranties or undertakings by the Company or you with respect to your employment by the Company, which are not set forth in this letter.

If you agree with the terms of this offer, please acknowledge your understanding and acceptance of this offer by signing where indicated below and return to me by 5:00 p.m. EST on March 9, 2016. We look forward to working with you.

Sincerely,

T2 Biosystems, Inc.

By: _/s/ Kelley Morgan_____6/7/2017_____
Kelley Morgan Date
Director of Human Resources

I have read agree with and accept the items contained in this letter.

By: __/s/ Alec Barclay_____6/7/2017_____
Alec Barclay Date

The Immigration Control and Reform Act of 1986 requires that all new employees complete the I-9 form and submit proof of employment eligibility to work in the United States within the first three days of their start date. If accepting employment the Company will provide you the I-9 form and requests that you present appropriate documents when you report to the Company and a representative of the Company will complete the I-9 form with you. Accordingly, you will have three days from your start date to submit proof of your eligibility to work in the United States.

Active: 2016

**EXHIBIT 10.36**

**T2 BIOSYSTEMS, INC.**

February 1, 2017

Alec Barclay
700 1st Street, 3G
Hoboken, NJ 07030

Dear Alec,

This letter sets forth the agreement between you and T2 Biosystems, Inc. (the "Company") regarding certain terms and conditions of your employment. You are entitled to receive the following:

1. Severance Compensation. If your employment is terminated either by you with Good Reason within 12 months following a Change of Control, or by the Company without Cause within 3 months preceding or within 12 months following a Change of Control, subject to your executing and delivering to the Company, and not revoking, a release of claims in a form acceptable to the Company (the "Release") within the 30-day period following your termination of employment:

(a) the Company will pay you severance in an amount equal to 6 months of your then current annual base salary, payable in equal installments over a period of 6 months (the "Severance Period") in accordance with the Company's payroll practices, commencing on your termination of employment;

(b) if you have been continuously employed by the Company for at least one year as of the date your employment terminates, all of the outstanding unvested equity awards of the Company held by you shall become fully vested and, if applicable, exercisable as of the date of your termination, provided that with respect to any such awards intended to constitute "qualified performance based compensation" under Section 162(m) of the Code, whether a Change of Control has occurred shall be determined without regard to clause (iv) of the definition of Change of Control below; and

(c) If you timely elect continued group medical insurance coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company will reimburse you for a portion of the applicable premiums, based on the then-current cost-sharing rates for active employees, for you and your eligible dependents during the period commencing on the date of your termination of employment and ending on the earliest to occur of (a) the final day of the Severance Period, (b) the date you and/or your eligible dependents are no longer eligible for COBRA, and (c) the date you become eligible to receive medical insurance coverage from a subsequent employer (and you agree to notify the Company of such eligibility). Notwithstanding the foregoing, if the Company determines that it cannot provide such reimbursement of premiums to you without potentially violating applicable law, the Company

shall in lieu thereof provide to you a taxable monthly payment in an amount equal to a portion of the applicable premiums, based on then-current cost-sharing rates for active employees, which payment will be made regardless of whether you elect COBRA continuation coverage and will commence in the month following the month in which your termination of employment occurs and end on the earliest to occur of (x) the final day of the Severance Period, (y) the date you and/or your eligible dependents are no longer eligible for COBRA, and (z) the date you become eligible to receive medical insurance coverage from a subsequent employer (and you agree to notify the Company of such eligibility).

Notwithstanding anything herein to the contrary, in the event that any compensation or benefit that constitutes "nonqualified deferred compensation" within the meaning of Section 409A (as defined below) becomes payable upon the occurrence of a Change of Control, such compensation or benefit shall not be paid unless such Change of Control constitutes a "change in control event" within the meaning of Section 409A.

2. Definitions. For purposes of this letter, the terms "Change of Control," "Cause," and "Good Reason" shall have the following meanings.

(a) "Change of Control" means that any of the following events has occurred:

(i) Any person (as such term is used in Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than the Company, any employee benefit plan of the Company, or any entity organized, appointed, or established by the Company for or pursuant to the terms of any such plan, together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Exchange Act) becomes the beneficial owner or owners (as defined in Rule 13d-3 and 13d-5 promulgated under the Exchange Act), directly or indirectly (the "Control Group"), of more than 50% of the outstanding equity securities of the Company, or otherwise becomes entitled, directly or indirectly, to vote more than 50% of the voting power entitled to be cast at elections for directors ("Voting Power") of the Company, provided that a Change of Control will not have occurred if such Control Group acquired securities or Voting Power solely by purchasing securities from the Company, including, without limitation, acquisition of securities by one or more third party investors;

(ii) A consolidation or merger (in one transaction or a series of related transactions) of the Company pursuant to which the holders of the Company's equity securities immediately prior to such transaction or series of related transactions cease to be the holders, directly or indirectly, immediately after such transaction or series of related transactions of more than 50% of the Voting Power of the entity surviving such transaction or series of related transactions;

(iii) The sale, lease, exchange, or other transfer (in one transaction or series of related transactions) of all or substantially all of the assets of the Company; or

(iv) The liquidation or dissolution of the Company or the Company ceasing to do business.

(b) "Cause" means:

(i) Your conviction of a felony, either in connection with the performance of your obligations to the Company or which otherwise materially and adversely affects your ability to perform such obligations;

(ii) Your willful disloyalty to the Company or deliberate material dishonesty to the Company;

(iii) The commission by you of an act of fraud or embezzlement against the Company;

(iv) Your willful, substantial failure to perform any of your duties hereunder or your deliberate failure to follow reasonable, lawful directions of the Company's Board of Directors or your direct supervisor, which failure, if capable of being cured, is not cured within 30 days after delivery to you by the Company of written notice of such failure; or

(v) A material breach by you of any material provision of this letter which breach is not cured within 30 days after delivery to you by the Company of written notice of such breach.

(c) "Good Reason" means one or more of the following:

(i) A material change in the principal location at which you provide services to the Company, without your prior written consent;

(ii) A material and continuing diminution by the Company in the duties, authority or responsibilities of your position which causes such position to become of less responsibility or authority than immediately prior to such material and continuing diminution, provided that such change is not in connection with a termination of your employment hereunder by the Company;

(iii) A material reduction in your base salary or other benefits except if such a reduction is in connection with a general reduction in compensation or other benefits of all similarly situated employees of the Company;

(iv) Failure by the Company to obtain the assumption of this Agreement by any successor to the Company.

Notwithstanding the foregoing, Good Reason shall only exist if you have given written notice to the Company within 90 days of the initial existence of the Good Reason condition(s), and the Company has failed to cure such event(s) within 30 days of its receipt of said notice.

3. Section 409A.

(a) *Separation from Service*. Notwithstanding anything in this letter to the contrary, any compensation or benefit payable under this letter that is designated as payable upon your termination of employment shall be payable only upon your "separation from service" with the Company (a "Separation from Service") within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and guidance promulgated thereunder (collectively, "Section 409A"), and except as provided below, any such compensation or benefits shall not be paid, or, in the case of installments, shall not commence payment, until the 30th day following your Separation from Service. Any installment payments that would have been made to you during the 30 day period immediately following your Separation from Service but for the preceding sentence shall be paid to you on the 30th day following your Separation from Service and the remaining payments shall be made as provided in this letter.

(b) *Specified Employee*. Notwithstanding anything in this letter to the contrary, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which you are entitled under this letter is required in order to avoid a prohibited distribution under Section 409A, such portion of your benefits shall not be provided to you prior to the earlier of (i) the expiration of the six-month period measured from the date of your Separation from Service with the Company or (ii) the date of your death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump-sum to you (or your estate or beneficiaries), and any remaining payments due to you under this letter shall be paid as otherwise provided herein.

(c) *Installments*. Your right to receive any installment payments under this letter shall be treated as a right to receive a series of separate payments and, accordingly, each such installment payment shall at all times be considered a separate and distinct payment as permitted under Section 409A. Except as otherwise permitted under Section 409A, no payment hereunder shall be accelerated or deferred unless such acceleration or deferral would not result in additional tax or interest pursuant to Section 409A.

4. General

(a) No provision of this letter shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by you and by an authorized officer of the Company (other than you). No waiver by either party of any breach of, or of compliance with, any condition or provision of this letter by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time. The validity, interpretation, construction and performance of this letter shall be governed by the laws of the Commonwealth of Massachusetts without regard to conflicts of law. The invalidity or unenforceability of any provision or provisions of this letter shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect. This letter may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

(b) This letter contains the entire and exclusive agreement between the parties with respect to the subject matter hereof and is intended to supersede and replace all previous agreements, negotiations, and representations between the parties, whether written or oral, including any provision of the employment offer letter agreement between you and the Company, dated as of March 7, 2016, to the extent such letter addresses the subject matter hereof.

Sincerely,

T2 BIOSYSTEMS, INC.

By:/s/ John McDonough_____
Name:John McDonough
Title: President & CEO

Acknowledged and Agreed

_/s/ Alec Barclay_____
Alec Barclay

**EXHIBIT 10.37**

# AMENDMENT
# TO
# SEVERANCE AND CHANGE IN CONTROL AGREEMENT

**This Amendment to Severance and Change in Control Agreement** is entered into as of March 6, 2018, by and between T2 Biosystems, Inc., a Delaware corporation having its principal place of business at 101 Hartwell Avenue, Lexington, Massachusetts 02421 USA ("***T2 Bio***") and Alec Barclay ("***Employee***"). Capitalized terms used herein without definition shall have the meaning ascribed thereto in the Severance / Change in Control Agreement (as defined below).

## Recitals

A.T2 Bio and Employee previously executed that certain Letter Agreement governing severance compensation and payments upon a Change in Control, dated as of February 1, 2017 (as may be amended, restated, or otherwise modified, the "***Severance Agreement***").

B. T2 Bio and Distributor desire to amend the Severance Agreement.

**NOW THEREFORE,** in consideration of the foregoing and the mutual agreements set forth below, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties to this Amendment agree to amend the Severance Agreement in accordance with Section 4(a) thereof as follows:

**1. Amendment to Section 1(a).** Section 1(a) of the Severance Agreement is hereby amended by deleting it in its entirety and replacing it with the following:

"(a)the Company will pay you severance in an amount equal to 12 months of your then current annual base salary, payable in equal installments over a period of 12 months (the "Severance Period") in accordance with the Company's payroll practices, commencing on your termination of employment;"

**2.No Other Amendments**. Except to the extent amended hereby, all of the definitions, terms, provisions and conditions set forth in the Severance Agreement are hereby ratified and confirmed and shall remain in full force and effect. The Severance Agreement and this Amendment shall be read and construed together as a single agreement and the term "Agreement" shall henceforth be deemed a reference to the Severance Agreement as amended by this Amendment. This Amendment may be signed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument. In making proof of this Amendment, it shall not be necessary to produce or account for more than one such counterpart.

[Signature Page Follows]

**IN WITNESS WHEREOF**, the parties have caused this Amendment to be executed by their duly authorized representatives below.

**T2 BIOSYSTEMS, INC.**

| | | | |
|---|---|---|---|
| By: | /s/ Michael Gibbs | By: | /s/ Alec Barclay |
| Name: | Michael Gibbs | Name: | Alec Barclay |
| Title: | General Counsel | Date: | March 6, 2018 |

**EXHIBIT 10.38**

January 29, 2018

John Sprague
62 Washington Street
Wellesley, MA 02481

Dear John:

On behalf of T2 Biosystems, Inc., (the "Company") I am delighted to make this offer of employment to you to join us in the role of Chief Financial Officer for the Company beginning January 30, 2018.

At T2 Biosystems, our mission is to fundamentally change the way that medicine is practiced by transforming diagnostics for the tangible benefit of patients, practitioners and healthcare institutions. We have developed a breakthrough and innovative technology, T2MR, that has received the most prestigious industry awards and is protected by almost 50 patents. Our first products, T2Candida and the T2Dx, are already in use in over 100 hospitals in the United States and Europe. We are positively impacting the lives of patients and saving hospitals millions of dollars each year. Our next product, T2Bacteria, is expected to be FDA cleared this year and additional products are in development. There is a lot of growth ahead and you are joining us at a very exciting time!

John, we are thrilled to extend this offer of employment to you. We think you can help us fulfill our mission and we believe you'd be a great fit for our team. To kick things off, you will find all of the pertinent information related to our offer of employment in the attached pages. Please read the offer carefully and, if it is acceptable, sign and return one copy to my attention (PDF copy is fine).

If you have any questions, please do not hesitate to contact me at (781) 457-1220 or email at jmcdonough@t2biosystems.com. We are looking forward to having you on our team!

Sincerely,

/s/ John McDonough

John McDonough
President and Chief Executive Officer

## OFFER OF EMPLOYMENT

Date of employment: Should you accept the terms of this offer, your employment with the Company will commence on January 30, 2018.

Background check: Your employment is contingent upon your successful completion of a background check, which is required for all employees of the Company. The Company will forward you the appropriate documents, and such documents shall be required to be submitted to the Company by no later than one week prior to your start date.

Position: You have been offered the position of Chief Financial Officer. In this capacity, you will report to John McDonough, Chief Executive Officer, or his successor in such position. Your duties and responsibilities will include all those customarily attendant to such a position, and any other such duties or responsibilities that John McDonough or the Company may, from time to time, assign to you. You agree that you shall not enter into any employment endeavors which may conflict with your ability to devote the necessary time and energies to the Company's business interest while engaged by the Company. You further agree to comply with all applicable laws and with all Company rules and policies established by the Company from time to time.

Compensation and Tax Matters: Your salary shall be $14,583.34 (the equivalent of $350,000 when annualized), payable semi-monthly and subject to pro-ration for any partial initial or terminal week during which you are employed, in accordance with normal payroll practices and schedule of the Company. You will be eligible for a salary increase during the 2018 calendar year, and the timing of that adjustment will align with other members of the Company's executive management team.

You will be eligible to receive an annual bonus (the "Annual Bonus") based upon the achievement of specific company and individual milestones as determined by the Board of Directors (the "Board"). The target amount of your Annual Bonus will be 45% of your Base Salary, subject to adjustment by the Board. Payment of the Annual Bonus will be pro-rated for 2018 and will in all events be subject to your continued employment with the Company through the date of payment.

All compensation amounts stated are before any deductions for FICA taxes, state and federal withholding taxes and other payroll deductions required to be made by the Company under applicable law.

Stock Options: Subject to the approval of the Board and your execution of a Stock Option Agreement, you will be offered options to purchase 225,000 shares of T2 Biosystems common stock under an Inducement Award Plan to be established by the Company as soon as practicable following the date hereof (the "Inducement Plan"). Subject to the approval of the Inducement Plan by the Board, the exercise price of the options will be equal to the fair market value of the Company's common stock on the grant date, which shall be first permissible date under the Inducement Plan (determined in accordance with the terms of the Inducement Plan). The options will have a 4-year vesting schedule with 25% of the options vesting one year from the vesting commencement date (your start date) and the remaining options vesting in equal monthly installments over the following 36 months. The terms and conditions of the options shall be more fully described in the Inducement Plan and applicable Stock Option Agreement. In the event that the

Inducement Plan is not approved by the Board within thirty (30) days following your start date, subject to Board approval, the Company shall make such grant under its existing 2014 Incentive Award Plan.

Severance Compensation: Subject to the approval of the Board and your execution of the attached Change of Control Severance Agreement (the "Change in Control Agreement"), you will be offered certain benefits in the event of a change in control of the Company, as set forth in more detail and defined in the Change in Control Agreement, including severance compensation and the acceleration of certain stock options, each such benefit to be subject to the terms of the Change in Control Agreement.

In the event your employment is terminated by the Company for reasons other than Cause and unrelated to a Change in Control, both as defined in the Change in Control Agreement (but for the avoidance doubt excluding a termination of your employment (x) due to death, (y) due to your inability to perform your duties for the Company on account of physical or mental illness for a period of three consecutive full months or for a period of six full months during any 12-month rolling period or (z) in circumstances that entitle you to severance payments or benefits under the Change in Control Agreement), subject to your executing and delivering to the Company, and not revoking, a release of claims in a form acceptable to the Company (the "Release") within the 30-day period following your termination of employment, you will be entitled to receive severance benefits in the form of salary continuation and reimbursement for costs associated with COBRA, for a period of six (6) months following the end of your employment.

Fringe Benefits: You will have the opportunity to participate in the Company's fringe benefits program. Currently, these fringe benefits are as follows:

- The Company currently provides contributions toward a medical and dental plan for yourself and immediate family members
- Three (3) weeks paid vacation, Company designated holidays, personal holidays and sick days (see Benefits Summary for more information).
- The Company provides 100% contribution towards Term Life Insurance, Accidental Death and Dismemberment Insurance, and Short and Long-Term Disability Insurance;
- The opportunity to enroll in the Company's 401(k) Investment and Section 125 Plans based on plan eligibility requirements; and
- Pay or reimburse you in accordance with the Company's reimbursement policies from time to time in connection with the performance of your duties for the Company subject to your submission of satisfactory documentation with respect thereto.

The Company reserves the right to amend, delete or change any of its employment policies and/or benefits at any time in its sole discretion.

Non Competition/Non-Disclosure/Invention Assignment Agreement: No later than on the first day of your employment with the Company you will be required to sign the enclosed Non-Competition/Non-Disclosure/Inventions Assignment Agreement ("Obligations Agreement") which includes nondisclosure, inventions ownership, and other provisions that are necessary to protect the Company's confidential information, intellectual; property, trade secrets, and customer relationships. As you may be given access to such protectable interests, your employment is contingent upon your signing the Obligations

Agreement. The terms of the Obligations Agreement will survive termination, for whatever reason, of the employment relationship.

Prior Agreements: You acknowledge and confirm that you have provided/disclosed to the Company all restrictive covenants and agreements, including nondisclosure and confidentiality agreements, to which you are a party. You agree that you shall not disclose to the Company or use while an employee of the Company any confidential or trade secret information obtained by you from other persons or employers and shall not bring any property upon the Company premises which has been misappropriated by others. You also acknowledge that the Company expects you to honor any prior obligations to former employers to which you remain bound.

Employment At Will: Although you are being hired as an employee commencing on January 30, 2018, your employment with the Company shall be at will. This means that your employment is not guaranteed for any definite period of time, and you or the Company may terminate your employment relationship with or without notice at any time and for any or no reason or cause. The Company is not bound to follow any policy, procedure, or process in connection with employee discipline, employment termination or otherwise.

Entire Agreement: This letter (together with the attached Obligations Agreement and Change in Control Agreement) sets forth the entire understanding between the Company and yourself with respect to your employment by the Company. All prior discussions, negotiations, correspondence and other understandings between you and the Company are superseded, and there are no representations, warranties or undertakings by the Company or you with respect to your employment by the Company, which are not set forth in this letter.

Section 409A: Notwithstanding anything in this letter to the contrary, any compensation or benefit payable under this letter that is designated as payable upon your termination of employment shall be payable only upon your "separation from service" with the Company (a "Separation from Service") within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and guidance promulgated thereunder (collectively, "Section 409A"), and except as provided below, any such compensation or benefits shall not be paid, or, in the case of installments, shall not commence payment, until the 30th day following your Separation from Service. Any installment payments that would have been made to you during the 30 day period immediately following your Separation from Service but for the preceding sentence shall be paid to you on the 30th day following your Separation from Service and the remaining payments shall be made as provided in this letter. Notwithstanding anything in this letter to the contrary, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which you are entitled under this letter is required in order to avoid a prohibited distribution under Section 409A, such portion of your benefits shall not be provided to you prior to the earlier of (i) the expiration of the six-month period measured from the date of your Separation from Service with the Company or (ii) the date of your death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump-sum to you (or your estate or beneficiaries), and any remaining payments due to you under this letter shall be paid as otherwise provided herein. Your right to receive any installment payments under this letter shall be treated as a right to receive a series of separate payments and, accordingly, each such installment payment shall at all times be considered a separate and distinct payment as permitted under Section 409A. Except as otherwise permitted under Section 409A, no payment hereunder shall be accelerated or deferred unless such acceleration or deferral would not result in additional tax or interest pursuant to Section 409A.

Active: 2018

If you agree with the terms of this offer, please acknowledge your understanding and acceptance of this offer by signing where indicated below and return to me along with a completed background check authorization form by 8:00 a.m. ET on January 30, 2018. We look forward to working with you.

Sincerely,

T2 Biosystems, Inc.

By: ___/s/ John McDonough_____1/30/2018_____
John McDonough Date
Chief Executive Officer

I have read agree with and accept the items contained in this letter.

By: _/s/ John Sprague_____1/30/2018_____
John Sprague Date

The Immigration Control and Reform Act of 1986 requires that all new employees complete the I-9 form and submit proof of employment eligibility to work in the United States within the first three days of their start date. If accepting employment the Company will provide you the I-9 form and requests that you present appropriate documents when you report to the Company and a representative of the Company will complete the I-9 form with you. Accordingly, you will have three days from your start date to submit proof of your eligibility to work in the United States.

Active: 2018

**EXHIBIT 10.39**

**T2 BIOSYSTEMS, INC.**

**CHANGE OF CONTROL SEVERANCE AGREEMENT**

January 30, 2018

John M. Sprague
62 Washington Street
Wellesley, MA 02481

Dear John,

This letter sets forth the agreement between you and T2 Biosystems, Inc. (the "Company") regarding certain terms and conditions of your employment.

1. Severance Compensation. If your employment is terminated either by you with Good Reason within 12 months following a Change of Control, or by the Company without Cause within 3 months preceding or within 12 months following a Change of Control, subject to your executing and delivering to the Company, and not revoking, a release of claims in a form acceptable to the Company (the "Release") within the 30-day period following your termination of employment:

(a) the Company will pay you severance in an amount equal to 12 months of your then current annual base salary, payable in equal installments over a period of 12 months (the "Severance Period") in accordance with the Company's payroll practices, commencing on your termination of employment;

(b) if you have been continuously employed by the Company for less than one year as of the date your employment terminates, the vesting schedule of any equity awards of the Company held by you shall automatically be amended to state that all of the options subject to such equity award(s) scheduled to vest within 12 months of the date of your termination shall immediately accelerate and become fully vested;

(c) if you have been continuously employed by the Company for at least one year as of the date your employment terminates, all of the outstanding unvested equity awards of the Company held by you shall become fully vested and, if applicable, exercisable as of the date of your termination; and

(d) If you timely elect continued group medical and dental insurance coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company will reimburse you for a portion of the applicable premiums, based on the then-current cost-sharing rates for active employees, for you and your eligible dependents during the period commencing on the date of your termination of employment and ending on the earliest to occur of (a) the final day of the Severance Period, (b) the date you and/or your eligible dependents are no longer eligible for COBRA, and (c) the date you become eligible to receive medical insurance coverage from a subsequent employer (and you agree to notify the Company of

such eligibility). Notwithstanding the foregoing, if the Company determines that it cannot provide such reimbursement of premiums to you without potentially violating applicable law, the Company shall in lieu thereof provide to you a taxable monthly payment in an amount equal to a portion of the applicable premiums, based on then-current cost-sharing rates for active employees, which payment will be made regardless of whether you elect COBRA continuation coverage and will commence in the month following the month in which your termination of employment occurs and end on the earliest to occur of (x) the final day of the Severance Period, (y) the date you and/or your eligible dependents are no longer eligible for COBRA, and (z) the date you become eligible to receive medical insurance coverage from a subsequent employer (and you agree to notify the Company of such eligibility).

Notwithstanding anything herein to the contrary, in the event that any compensation or benefit that constitutes "nonqualified deferred compensation" within the meaning of Section 409A (as defined below) becomes payable upon the occurrence of a Change of Control, such compensation or benefit shall not be paid unless such Change of Control constitutes a "change in control event" within the meaning of Section 409A.

2. Definitions. For purposes of this letter, the terms "Change of Control," "Cause," and "Good Reason" shall have the following meanings.

(a) "Change of Control" means that any of the following events has occurred:

(i) Any person (as such term is used in Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than the Company, any employee benefit plan of the Company, or any entity organized, appointed, or established by the Company for or pursuant to the terms of any such plan, together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Exchange Act) becomes the beneficial owner or owners (as defined in Rule 13d-3 and 13d-5 promulgated under the Exchange Act), directly or indirectly (the "Control Group"), of more than 50% of the outstanding equity securities of the Company, or otherwise becomes entitled, directly or indirectly, to vote more than 50% of the voting power entitled to be cast at elections for directors ("Voting Power") of the Company, provided that a Change of Control will not have occurred if such Control Group acquired securities or Voting Power solely by purchasing securities from the Company, including, without limitation, acquisition of securities by one or more third party investors;

(ii) A consolidation or merger (in one transaction or a series of related transactions) of the Company pursuant to which the holders of the Company's equity securities immediately prior to such transaction or series of related transactions cease to be the holders, directly or indirectly, immediately after such transaction or series of related transactions of more than 50% of the Voting Power of the entity surviving such transaction or series of related transactions;

(iii) The sale, lease, exchange, or other transfer (in one transaction or series of related transactions) of all or substantially all of the assets of the Company; or

(iv) The liquidation or dissolution of the Company or the Company ceasing to do business.

(b) "Cause" means:

(i) Your conviction of a felony, either in connection with the performance of your obligations to the Company or which otherwise materially and adversely affects your ability to perform such obligations;

(ii) Your willful disloyalty to the Company or deliberate material dishonesty to the Company;

(iii) The commission by you of an act of fraud or embezzlement against the Company;

(iv) Your willful, substantial failure to perform any of your duties hereunder or your deliberate failure to follow reasonable, lawful directions of the Company's Board of Directors or your direct supervisor, which failure, if capable of being cured, is not cured within 30 days after delivery to you by the Company of written notice of such failure; or

(v) A material breach by you of any material provision of this letter which breach is not cured within 30 days after delivery to you by the Company of written notice of such breach.

(c) "Good Reason" means one or more of the following:

(i) A material change in the principal location at which you provide services to the Company, without your prior written consent;

(ii) A material and continuing diminution by the Company in the duties, authority or responsibilities of your position which causes such position to become of less responsibility or authority than immediately prior to such material and continuing diminution, provided that such change is not in connection with a termination of your employment hereunder by the Company (for purposes of clarity, if you are not the Chief Financial Officer of the combined public company following the Change of Control, you shall be deemed to have a material diminution of your duties);

(iii) A material reduction in your base salary or other benefits except if such a reduction is in connection with a general reduction in compensation or other benefits of all similarly situated employees of the Company;

(iv) Failure by the Company to obtain the assumption of this Agreement by any successor to the Company.

Notwithstanding the foregoing, Good Reason shall only exist if you have given written notice to the Company within 90 days of the initial existence of the Good Reason condition(s), and the Company has failed to cure such event(s) within 30 days of its receipt of said notice.

3. Section 409A.

(a) *Separation from Service*. Notwithstanding anything in this letter to the contrary, any compensation or benefit payable under this letter that is designated as payable upon your termination of employment shall be payable only upon your "separation from service" with the Company (a "Separation from Service") within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and guidance promulgated thereunder (collectively, "Section 409A"), and except as provided below, any such compensation or benefits shall not be paid, or, in the case of installments, shall not commence payment, until the 30th day following your Separation from Service. Any installment payments that would have been made to you during the 30 day period immediately following your Separation from Service but for the preceding sentence shall be paid to you on the 30th day following your Separation from Service and the remaining payments shall be made as provided in this letter.

(b) *Specified Employee*. Notwithstanding anything in this letter to the contrary, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which you are entitled under this letter is required in order to avoid a prohibited distribution under Section 409A, such portion of your benefits shall not be provided to you prior to the earlier of (i) the expiration of the six-month period measured from the date of your Separation from Service with the Company or (ii) the date of your death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump-sum to you (or your estate or beneficiaries), and any remaining payments due to you under this letter shall be paid as otherwise provided herein.

(c) *Installments*. Your right to receive any installment payments under this letter shall be treated as a right to receive a series of separate payments and, accordingly, each such installment payment shall at all times be considered a separate and distinct payment as permitted under Section 409A. Except as otherwise permitted under Section 409A, no payment hereunder shall be accelerated or deferred unless such acceleration or deferral would not result in additional tax or interest pursuant to Section 409A.

4. General

(a) No provision of this letter shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by you and by an authorized officer of the Company (other than you). No waiver by either party of any breach of, or of compliance with, any condition or provision of this letter by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at

another time. The validity, interpretation, construction and performance of this letter shall be governed by the laws of the Commonwealth of Massachusetts without regard to conflicts of law. The invalidity or unenforceability of any provision or provisions of this letter shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect. This letter may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

(b) This letter contains the entire and exclusive agreement between the parties with respect to the subject matter hereof and is intended to supersede and replace all previous agreements, negotiations, and representations between the parties, whether written or oral, including any provision of the employment offer letter agreement between you and the Company, dated as of January 30, 2018, to the extent such letter addresses the subject matter hereof.

Sincerely,

T2 BIOSYSTEMS, INC.

By:/s/ John McDonough_____
Name:John McDonough
Title: President & CEO

Acknowledged and Agreed

/s/ John Sprague_____
John M. Sprague

**EXHIBIT 10.40**

**AMENDMENT NO. 2 TO COMMERCIAL LEASE BETWEEN COLUMBUS DAY REALTY, INC., AND T2 BIOSYSTEMS, INC.**

This Amendment No. 2 is to a Commercial Lease dated May 6, 2013, by and between Columbus Day Realty, Inc. (LESSOR), and T2 Biosystems, Inc. (LESSEE), which lease relates to the premises at 231 Andover Street, Wilmington, Massachusetts.

WHEREAS, the Commercial Lease is dated May 6, 2013;

WHEREAS, the parties signed Amendment No. 1 to the Commercial Lease on September 24, 2013;

WHEREAS, the parties are desirous of amending the Commercial Lease for the purpose of extending the term of the Lease to December 31, 2017;

NOW, THEREFORE, in accordance with the covenants, considerations and conditions contained herein, the parties agree to further amend the Commercial Lease as follows:

3. TERM.

This paragraph of the Commercial Lease is hereby amended by extending the expiration date to December 31, 2017.

25. OPTION TO EXTEND.

In substitution for the Option to Extend which was granted to the LESSEE in this said Paragraph 25 of the Commercial Lease, the parties agree that the term of the Lease shall be extended to December 31, 2017. This extension shall be on the same terms and conditions as the original Lease, as changed by Amendment No. 1, and the

base rent for the remainder of the term shall continue at the rate of Nine Dollars ($9.00) per square foot.

This extension replaces the Option to Extend in the original Commercial Lease and the parties agree that that option shall now be considered null and void.

Except as modified by this Amendment, all other terms of the Commercial Lease and Amendment No. 1 shall remain in full force and effect for the remaining term of the Lease.

IN WITNESS WHEREOF, the LESSOR and LESSEE have set their hands and seals this 21st day of September, 2015.

COLUMBUS DAY REALTY, INC.

By: [Illegible]

Its President

By: [Illegible]

Its Treasurer

T2 BIOSYSTEMS, INC.

By: /s/ Michael Gibbs

Its Senior Corporate Counsel

**EXHIBIT 10.41**

**AMENDMENT NO. 3 TO COMMERCIAL LEASE BETWEEN COLUMBUS DAY REALTY, INC., AND T2 BIOSYSTEMS, INC.**

This Amendment No. 3 is to a Commercial Lease dated May 6, 2013, by and between Columbus Day Realty, Inc. (LESSOR), and T2 Biosystems, Inc. (LESSEE), which lease relates to the premises at 231 Andover Street, Wilmington, Massachusetts.

WHEREAS, the Commercial Lease is dated May 6, 2013;

WHEREAS, the parties signed Amendment No. 1 to the Commercial Lease on September 24, 2013;

WHEREAS, the parties signed Amendment No. 2 to the Commercial Lease on September 21, 2015;

WHEREAS, the parties are desirous of amending the Commercial Lease for the purpose of extending the term of the Lease to December 31, 2018;

NOW, THEREFORE, in accordance with the covenants, considerations and conditions contained herein, the parties agree to further amend the Commercial Lease as follows:

3. TERM.

This paragraph of the Commercial Lease is hereby amended by extending the expiration date to December 31, 2018.

4. RENT.

The base rent for the period of January 1, 2018 to December 31, 2018 shall be at the rate of Ten Dollars ($10.00) per square foot.

Except as modified by this Amendment, all other terms of the Commercial Lease and Amendments No. 1 and No. 2 shall remain in full force and effect for the remaining term of the Lease.

IN WITNESS WHEREOF, the LESSOR and LESSEE have set their hands and seals this 10th day of August, 2017.

COLUMBUS DAY REALTY, INC.

By: [Illegible]

Its President

By: [Illegible]

Its Treasurer

T2 BIOSYSTEMS, INC.

By: /s/ John McDonough

Its President & CEO

**EXHIBIT 10.42**

# AMENDMENT NO. 2 TO TERM LOAN AGREEMENT

THIS AMENDMENT NO. 2 TO TERM LOAN AGREEMENT, dated as of December 18, 2017 (this "***Amendment***") is made among T2 BIOSYSTEMS, INC., a Delaware corporation ("***Borrower***"), CRG SERVICING LLC, as administrative agent and collateral agent (in such capacities, "***Administrative Agent***") and the lenders listed on the signature pages hereof under the heading "LENDERS" (each, a "***Lender***" and, collectively, the "***Lenders***"), with respect to the Loan Agreement described below.

## RECITALS

WHEREAS, Borrower, Administrative Agent and the Lenders are parties to the Term Loan Agreement, dated as of December 30, 2016, with the Subsidiary Guarantors from time to time party thereto (as amended by Amendment No. 1 to Term Loan Agreement, dated as of March 1, 2017, among Borrower, Administrative Agent and the lenders party thereto, and as further amended, supplemented or modified to date, the "***Loan Agreement***"); and

WHEREAS, Borrower has requested that Administrative Agent and the Lenders (which Lenders constitute the Majority Lenders), and Administrative Agent and the Lenders (which Lenders constitute the Majority Lenders) have agreed to, amend the Minimum Required Revenue in **Section 10.02(a)** of the Loan Agreement.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein, the parties agree as follows:

**SECTION 1. Definitions; Interpretation**.

(a) **Terms Defined in Loan Agreement**. All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan Agreement.

(b) **Interpretation**. The rules of interpretation set forth in **Section 1.03** of the Loan Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

**SECTION 2. Amendment to Loan Agreement**. Subject to **Section 3** of this Amendment, **Section 10.02(a)** of the Loan Agreement is hereby amended and restated in its entirety as follows:

"(a) during the twelve-month period beginning on January 1, 2017, of at least $[********];"

**SECTION 3. Conditions of Effectiveness**. The effectiveness of **Section 2** of this Amendment shall be subject to the following conditions precedent:

(a) Borrower, Administrative Agent and the Lenders, which constitute the Majority Lenders, shall have duly executed and delivered this Amendment pursuant to **Section 13.04** of the Loan Agreement; *provided*, *however*, that this Amendment shall have no binding force or effect unless all conditions set forth in this **Section 3** have been satisfied;

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions

(b) No Default or Event of Default under the Loan Agreement shall have occurred and be continuing; and

(c) Borrower shall have paid or reimbursed Administrative Agent and the Lenders for their reasonable out of pocket costs and expenses (including the reasonable fees and expenses of Administrative Agent's and the Lenders' legal counsel) incurred in connection with this Amendment pursuant to **Section 13.03(a)(i)(z)** of the Loan Agreement.

**SECTION 4. Representations and Warranties; Reaffirmation**.

(a) Borrower hereby represents and warrants to each Lender as follows:

(i) Borrower has full power, authority and legal right to make and perform this Amendment. This Amendment is within Borrower's corporate powers and has been duly authorized by all necessary corporate action and, if required, by all necessary shareholder action. This Amendment has been duly executed and delivered by Borrower and constitutes a legal, valid and binding obligation of Borrower, enforceable against Borrower 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). This Amendment (x) does not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any third party, except for such as have been obtained or made and are in full force and effect, (y) will not violate (i) the charter, bylaws or other organizational documents of Borrower and its Subsidiaries or (ii) any applicable law or regulation or any order of any Governmental Authority, other than any such violations in the case of this clause (ii) that, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect and (z) will not violate or result in a default under any Material Agreement or agreement creating or evidencing any Material Indebtedness, or give rise to a right thereunder to require any payment to be made by any such Person.

(ii) No Default has occurred or is continuing or will result after giving effect to this Amendment.

(iii) The representations and warranties in **Section 7** of the Loan Agreement are true and correct in all material respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement) (unless qualified by materiality or Material Adverse Effect, in which case they are true in all respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement)) on and as of the date hereof, with the same force as if made on and as of the date hereof (except that the representation regarding representations and warranties that refer to a specific earlier date is that they were true and correct in all material respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement) (unless qualified by materiality or Material Adverse Effect, in which case they are true in and correct in all respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement)) on such earlier date).

(iv) There has been no Material Adverse Effect since the date of the Loan Agreement.

(b) Borrower hereby ratifies, confirms, reaffirms, and acknowledges its obligations under the Loan Documents to which it is a party and agrees that the Loan Documents remain in full force and effect, undiminished by this Amendment, except as expressly provided herein. By executing this Amendment, Borrower acknowledges that it has read, consulted with its attorneys regarding, and understands, this Amendment.

(c) Borrower and the Lenders hereby acknowledge and agree that, upon an event of an acceleration or other mandatory prepayment event, the "***Redemption Date***" for purposes of calculating the Prepayment Premium due and payable upon such acceleration or other mandatory prepayment will be the date of such acceleration or such obligation to mandatorily prepay arose.

**SECTION 5. Release**. In consideration of the agreements of Administrative Agent and the Lenders contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, on behalf of itself and its successors, assigns and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Administrative Agent and each Lender, and their respective successors and assigns, and their respective present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Administrative Agent, each Lender and all such other persons being hereinafter referred to collectively as the "***Releasees***" and individually as a "***Releasee***"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which Borrower or any of its successors, assigns or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement or any of the other Loan Documents or transactions thereunder or related thereto (collectively, the "***Released Claims***"). Borrower understands, acknowledges and agrees that the release set forth above (the "***Release***") may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of the Release. Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the Release. Borrower acknowledges that the Release constitutes a material inducement to Administrative Agent and the Lenders to enter into this Amendment and that Administrative Agent and the Lenders would not have done so but for Administrative Agent's and each Lender's expectation that the Release is valid and enforceable in all events.

**SECTION 6. Governing Law; Submission to Jurisdiction; Waiver of Jury Trial**.

(a) **Governing Law**. This Amendment and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; *provided that* Section 5-1401 of the New York General Obligations Law shall apply.

(b) **Submission to Jurisdiction**. Borrower agrees that any suit, action or proceeding with respect to this Amendment or any judgment entered by any court in respect thereof may be brought initially in the federal or state courts in Houston, Texas or in the courts of its own corporate domicile and irrevocably submits to the non-exclusive jurisdiction of each such court for the purpose of any such suit, action, proceeding or judgment. This **Section 6** is for the benefit of Administrative Agent and the Lenders only and, as a result, none of Administrative Agent or any Lender shall be prevented from taking proceedings in any other courts with jurisdiction. To the extent allowed by applicable Laws, Administrative Agent and the Lenders may take concurrent proceedings in any number of jurisdictions.

(c) **Waiver of Jury Trial**. Borrower, Administrative Agent and each Lender 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 Amendment.

**SECTION 7. Miscellaneous**.

(a) **No Waiver**. Except as expressly stated herein, nothing contained herein shall be deemed to constitute a waiver of compliance with any term or condition contained in the Loan Agreement or any of the other Loan Documents or constitute a course of conduct or dealing among the parties. Except as expressly stated herein, Administrative Agent and the Lenders reserve all rights, privileges and remedies under the Loan Documents. Except as amended hereby, the Loan Agreement and other Loan Documents remain unmodified and in full force and effect. All references in the Loan Documents to the Loan Agreement shall be deemed to be references to the Loan Agreement as amended hereby.

(b) **Severability**. In case any provision of or obligation under this Amendment shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

(c) **Headings**. Headings and captions used in this Amendment (including the Exhibits, Schedules and Annexes hereto, if any) are included for convenience of reference only and shall not be given any substantive effect.

(d) **Integration**. This Amendment constitutes a Loan Document and, together with the other Loan Documents, incorporates all negotiations of the parties hereto with respect to the subject matter hereof and is the final expression and agreement of the parties hereto with respect to the subject matter hereof.

(e) **Counterparts**. This Amendment 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 Amendment by signing any such counterpart. Executed counterparts delivered by facsimile or other electronic transmission (e.g., "PDF" or "TIF") shall be effective as delivery of a manually executed counterpart.

(f) **Controlling Provisions**. In the event of any inconsistencies between the provisions of this Amendment and the provisions of any other Loan Document, the provisions of this Amendment shall govern and prevail. Except as expressly modified by this Amendment, the Loan Documents shall not be modified and shall remain in full force and effect.

(g) **Notices**. Administrative Agent and the Lenders hereby designate that all notices, requests, instructions, directions and other communications provided for herein shall be provided in accordance with **Section 13.02** of the Loan Agreement to the address specified on the signature pages hereto.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment as of the date first above written.

BORROWER:

**T2 BIOSYSTEMS, INC.**
By /s/ John McDonough____
Name: John McDonough
Title: President & CEO

Address for Notices:
101 Hartwell Avenue
Lexington, MA 02421
Attn: Michael Gibbs
Tel.: (781) 761-4630
Fax: (781) 538-4020
Email: mgibbs@t2biosystems.com

ADMINISTRATIVE AGENT:

**CRG SERVICING LLC**

By /s/ Nathan Hukill_____
Name: /s/ Nathan Hukill
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

LENDERS:

**CRG PARTNERS III – PARALLEL FUND "A" L.P.**
By CRG PARTNERS III – PARALLEL FUND "A" GP L.P., its General Partner
By CRG PARTNERS III – PARALLEL FUND "A" GP LLC, its General Partner

By /s/ Nathan Hukill____
Name: /s/ Nathan Hukill
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

**CRG PARTNERS III (CAYMAN) UNLEV AIV I L.P.**

By CRG PARTNERS III (CAYMAN) GP L.P., its General Partner
By CRG PARTNERS III (CAYMAN) GP LLC, its General Partner

By /s/ Nathan Hukill_____
Name: Nathan Hukill
Title: Authorized Signatory

Witness: /s/ Nicole Nesson _____

Name: /s/ Nicole Nesson_____

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

**CRG ISSUER 2017-1**
By CRG SERVICING LLC, acting by power of attorney

By: /s/ Nathan Hukill_____
Name: Nathan Hukill
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

**EXHIBIT 10.43**

## AMENDMENT NO. 3 TO TERM LOAN AGREEMENT

THIS AMENDMENT NO. 3 TO TERM LOAN AGREEMENT, dated as of March 16, 2018 (this "***Amendment***") is made among T2 BIOSYSTEMS, INC., a Delaware corporation ("***Borrower***"), CRG SERVICING LLC, as administrative agent and collateral agent (in such capacities, "***Administrative Agent***") and the lenders listed on the signature pages hereof under the heading "LENDERS" (each, a "***Lender***" and, collectively, the "***Lenders***"), with respect to the Loan Agreement described below.

### RECITALS

WHEREAS, Borrower, Administrative Agent and the Lenders are parties to the Term Loan Agreement, dated as of December 30, 2016, with the Subsidiary Guarantors from time to time party thereto (as amended by Amendment No. 1 to Term Loan Agreement, dated as of March 1, 2017, among Borrower, Administrative Agent and the lenders party thereto, and as further amended by Amendment No. 2 to Term Loan Agreement, dated as of December 18, 2017, among Borrower, Administrative Agent and the lenders party thereto, and as further amended, supplemented or modified to date, the "***Loan Agreement***"); and

WHEREAS, Borrower has requested that Administrative Agent and the Lenders (which Lenders constitute the Majority Lenders), and Administrative Agent and the Lenders (which Lenders constitute the Majority Lenders) have agreed to, amend the Minimum Required Revenue in **Section 10.02(b)** of the Loan Agreement and make certain other changes as more fully set forth herein.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein, the parties agree as follows:

**SECTION 1. Definitions; Interpretation**.

(a) **Terms Defined in Loan Agreement**. All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan Agreement.

(b) **Interpretation**. The rules of interpretation set forth in **Section 1.03** of the Loan Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

**SECTION 2. Amendment to Loan Agreement**. Subject to **Section 3** of this Amendment, the Loan Agreement is hereby amended as follows:

(a) The definition of "Approval Milestone" in **Section 1.01** of the Loan Agreement shall be amended and restated in its entirety as follows:

> "***Approval Milestone***" means 510(k) clearance for the marketing of T2Bacteria™ by the United States Food and Drug Administration on or prior to June 30, 2018.

(b) **Section 6.02(a)** of the Loan Agreement is hereby amended and restated in its entirety as follows:

"(a) **Borrowing Date**. Such Borrowing shall occur on or prior to September 27, 2018."

(c) **Section 8.01(g)** of the Loan Agreement is hereby amended and restated in its entirety as follows:

"(g) concurrent with delivery thereof to Borrower's directors, copies of any materials of any type made available to Borrower's directors, including, without limitation, presentations, correspondence, projections, memoranda, reports, term sheets, agreements, notices, minutes, consents and any other material that Borrower makes available to its directors for such meetings, but excluding in each case (i) any materials provided to such directors in any capacity other than of a director, (ii) any materials or information that is subject to attorney-client privilege if such exclusion is reasonably necessary to preserve the attorney-client privilege, and (iii) any material or information relating to a refinancing of the Loans."

(d) **Section 10.02(b)** of the Loan Agreement is hereby amended and restated in its entirety as follows:

"(b) during the twelve month period beginning on January 1, 2018, of at least $[******];"

(e) **Annex B** of **Exhibit E** of the Loan Agreement is hereby replaced in its entirety by **Annex B to Compliance Certificate** attached hereto.

**SECTION 3. Conditions of Effectiveness**. The effectiveness of **Section 2** of this Amendment shall be subject to the following conditions precedent:

(a) Borrower, Administrative Agent and the Lenders, which constitute the Majority Lenders, shall have duly executed and delivered this Amendment pursuant to **Section 13.04** of the Loan Agreement; *provided*, *however*, that this Amendment shall have no binding force or effect unless all conditions set forth in this **Section 3** have been satisfied;

(b) No Default or Event of Default under the Loan Agreement shall have occurred and be continuing; and

(c) Borrower shall have paid or reimbursed Administrative Agent and the Lenders for their reasonable out of pocket costs and expenses (including the reasonable fees and expenses of Administrative Agent's and the Lenders' legal counsel) incurred in connection with this Amendment pursuant to **Section 13.03(a)(i)(z)** of the Loan Agreement.

**SECTION 4. Representations and Warranties; Reaffirmation**.

(a) Borrower hereby represents and warrants to each Lender as follows:

(i) Borrower has full power, authority and legal right to make and perform this Amendment. This Amendment is within Borrower's corporate powers and has been duly

authorized by all necessary corporate action and, if required, by all necessary shareholder action. This Amendment has been duly executed and delivered by Borrower and constitutes a legal, valid and binding obligation of Borrower, enforceable against Borrower 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). This Amendment (x) does not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any third party, except for such as have been obtained or made and are in full force and effect, (y) will not violate (i) the charter, bylaws or other organizational documents of Borrower and its Subsidiaries or (ii) any applicable law or regulation or any order of any Governmental Authority, other than any such violations in the case of this clause (ii) that, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect and (z) will not violate or result in a default under any Material Agreement or agreement creating or evidencing any Material Indebtedness, or give rise to a right thereunder to require any payment to be made by any such Person.

(ii) No Default has occurred or is continuing or will result after giving effect to this Amendment.

(iii) The representations and warranties in **Section 7** of the Loan Agreement are true and correct in all material respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement) (unless qualified by materiality or Material Adverse Effect, in which case they are true in all respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement)) on and as of the date hereof, with the same force as if made on and as of the date hereof (except that the representation regarding representations and warranties that refer to a specific earlier date is that they were true and correct in all material respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement) (unless qualified by materiality or Material Adverse Effect, in which case they are true in and correct in all respects (taking into account any changes made to schedules updated in accordance with **Section 7.20** of the Loan Agreement)) on such earlier date).

(iv) There has been no Material Adverse Effect since the date of the Loan Agreement.

(b) Borrower hereby ratifies, confirms, reaffirms, and acknowledges its obligations under the Loan Documents to which it is a party and agrees that the Loan Documents remain in full force and effect, undiminished by this Amendment, except as expressly provided herein. By executing this Amendment, Borrower acknowledges that it has read, consulted with its attorneys regarding, and understands, this Amendment.

**SECTION 5. Release**. In consideration of the agreements of Administrative Agent and the Lenders contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, on behalf of itself and its successors, assigns and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably

releases, remises and forever discharges Administrative Agent and each Lender, and their respective successors and assigns, and their respective present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Administrative Agent, each Lender and all such other persons being hereinafter referred to collectively as the "***Releasees***" and individually as a "***Releasee***"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which Borrower or any of its successors, assigns or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement or any of the other Loan Documents or transactions thereunder or related thereto (collectively, the "***Released Claims***"). Borrower understands, acknowledges and agrees that the release set forth above (the "***Release***") may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of the Release. Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the Release. Borrower acknowledges that the Release constitutes a material inducement to Administrative Agent and the Lenders to enter into this Amendment and that Administrative Agent and the Lenders would not have done so but for Administrative Agent's and each Lender's expectation that the Release is valid and enforceable in all events.

**SECTION 6. Governing Law; Submission to Jurisdiction; Waiver of Jury Trial**.

(a) **Governing Law**. This Amendment and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; *provided that* Section 5-1401 of the New York General Obligations Law shall apply.

(b) **Submission to Jurisdiction**. Borrower agrees that any suit, action or proceeding with respect to this Amendment or any judgment entered by any court in respect thereof may be brought initially in the federal or state courts in Houston, Texas or in the courts of its own corporate domicile and irrevocably submits to the non-exclusive jurisdiction of each such court for the purpose of any such suit, action, proceeding or judgment. This **Section 6** is for the benefit of Administrative Agent and the Lenders only and, as a result, none of Administrative Agent or any Lender shall be prevented from taking proceedings in any other courts with jurisdiction. To the extent allowed by applicable Laws, Administrative Agent and the Lenders may take concurrent proceedings in any number of jurisdictions.

(c) **Waiver of Jury Trial**. Borrower, Administrative Agent and each Lender 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 Amendment.

**SECTION 7. Miscellaneous**.

(a) **No Waiver**. Except as expressly stated herein, nothing contained herein shall be deemed to constitute a waiver of compliance with any term or condition contained in the Loan Agreement or any of the other Loan Documents or constitute a course of conduct or dealing among the parties. Except as expressly stated herein, Administrative Agent and the Lenders reserve all rights, privileges and remedies under the Loan Documents. Except as amended hereby, the Loan Agreement and other Loan Documents remain unmodified and in full force and effect. All references in the Loan Documents to the Loan Agreement shall be deemed to be references to the Loan Agreement as amended hereby.

(b) **Severability**. In case any provision of or obligation under this Amendment shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

(c) **Headings**. Headings and captions used in this Amendment (including the Exhibits, Schedules and Annexes hereto, if any) are included for convenience of reference only and shall not be given any substantive effect.

(a) **Integration**. This Amendment constitutes a Loan Document and, together with the other Loan Documents, incorporates all negotiations of the parties hereto with respect to the subject matter hereof and is the final expression and agreement of the parties hereto with respect to the subject matter hereof.

(b) **Counterparts**. This Amendment 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 Amendment by signing any such counterpart. Executed counterparts delivered by facsimile or other electronic transmission (e.g., "PDF" or "TIF") shall be effective as delivery of a manually executed counterpart.

(c) **Controlling Provisions**. In the event of any inconsistencies between the provisions of this Amendment and the provisions of any other Loan Document, the provisions of this Amendment shall govern and prevail. Except as expressly modified by this Amendment, the Loan Documents shall not be modified and shall remain in full force and effect.

(d) **Notices**. Administrative Agent and the Lenders hereby designate that all notices, requests, instructions, directions and other communications provided for in connection with the Loan Agreement shall be provided in accordance with **Section 13.02** of the Loan Agreement to the address specified on the signature pages hereto.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment as of the date first above written.

BORROWER:

**T2 BIOSYSTEMS, INC.**
By /s/ John McDonough
Name: John McDonough
Title: President & CEO

Address for Notices:
101 Hartwell Avenue
Lexington, MA 02421
Attn: Michael Gibbs
Tel.: (781) 761-4630
Fax: (781) 538-4020
Email: mgibbs@t2biosystems.com

ADMINISTRATIVE AGENT:

**CRG SERVICING LLC**

By _____
Name:
Title:

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

LENDERS:

**CRG PARTNERS III – PARALLEL FUND "A" L.P.**
By CRG PARTNERS III – PARALLEL FUND "A" GP L.P., its General Partner
By CRG PARTNERS III – PARALLEL FUND "A" GP LLC, its General Partner

By _____
Name:
Title:

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

**CRG PARTNERS III (CAYMAN) UNLEV AIV I L.P.**

By CRG PARTNERS III (CAYMAN) GP L.P., its General Partner
By CRG PARTNERS III (CAYMAN) GP LLC, its General Partner

By _____
Name: Nathan Hukill
Title: Authorized Signatory

Witness: _____

Name: _____

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

**CRG ISSUER 2017-1**

By CRG SERVICING LLC, acting by power of attorney

By: _____

Name:

Title:

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

**EXHIBIT 10.44**

**AMENDMENT NUMBER THREE**
**TO**
**CONSULTING AGREEMENT**

**This Amendment Number Three to Consulting Agreement** (this "*Amendment*") is entered into this 13th day of October, 2017, between T2 Biosystems, Inc., a Delaware corporation (the "*Company*"), and Dr. Robert Langer (the "*Consultant*"). Capitalized terms used herein without definition shall have the meaning ascribed thereto in the Consulting Agreement (as defined below).

**Recitals**

**A.** The Company and the Consultant have entered into that certain Consulting Agreement, dated as of July 20, 2006, as amended by that certain letter dated March 20, 2013 and further amended by that certain letter dated July 24, 2014 (collectively, the "*Consulting Agreement*"), pursuant to which the Consultant agreed to provide certain services to the Company on the terms and conditions set forth therein.

**B.** The Company and the Consultant mutually desire to amend the Consulting Agreement to revise certain terms relating to, among other things, the term of the Consulting Agreement and the compensation of the Consultant.

**NOW, THEREFORE**, in consideration of the foregoing and the mutual promises made herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree to amend the Consulting Agreement in accordance with Section 20 of the Consulting Agreement as follows:

**1.** **Amendment of Term**. The first sentence of Section 6 of the Consulting Agreement is hereby amended by deleting the word "third" and replacing it with the word "sixth" immediately prior to the word "anniversary".

**2.** **Amendment of Compensation**. Section 7 of the Consulting Agreement (as amended to date) is hereby amended by deleting clause (a) in its entirety and replacing it with the following:

"(a) During the Term, the Company shall pay you annual compensation of $25,000 per year, to be paid in quarterly installments.

**3.** **No Other Amendments**. Except to the extent amended hereby, all of the definitions, terms, provisions and conditions set forth in the Consulting Agreement are hereby ratified and confirmed and shall remain in full force and effect. The Consulting Agreement, and this Amendment shall be read and construed together as a single agreement and the term "Agreement" shall henceforth be deemed a reference to the Consulting Agreement as amended by this Amendment. This Amendment may be signed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument. In making proof of this Amendment, it shall not be necessary to produce or account for more than one such counterpart.

**In Witness Whereof**, the parties have duly authorized and caused this Amendment to be executed as of the date first written above.

**T2 BIOSYSTEMS, INC.**

By:/s/ John McDonough

Name: John McDonough

Title: President & CEO

**CONSULTANT:**

/s/ Robert Langer
Name: Dr. Robert Langer

**EXHIBIT 10.45**

April 16, 2017

Darlene Deptula-Hicks
30 Crane Crossing Road
Plaistow, NH 03865

Dear Darlene:

On behalf of T2 Biosystems, Inc., (the "Company") I am delighted to make this offer of employment to you to join us in the role of Senior Vice President and Chief Financial Officer for the Company beginning May 1, 2017.

At T2 Biosystems, our mission is to fundamentally change the way that medicine is practiced by transforming diagnostics for the tangible benefit of patients, practitioners and healthcare institutions. We have developed a breakthrough and innovative technology, T2MR, that has received the most prestigious industry awards and is protected by almost 50 patents. Our first products, T2Candida and the T2Dx, are already in use in over 100 hospitals in the United States and Europe. We are positively impacting the lives of patients and saving hospitals millions of dollars each year. Our next product, T2Bacteria, is expected to be FDA cleared later this year and additional products are in development. There is a lot of growth ahead and you are joining us at a very exciting time!

Darlene, we are thrilled to extend this offer of employment to you. We think you can help us fulfill our mission and we believe you'd be a great fit for our team. To kick things off, you will find all of the pertinent information related to our offer of employment in the attached pages. Please read the offer carefully and, if it is acceptable, sign and return one copy to my attention (PDF copy is fine).

If you have any questions, please do not hesitate to contact me at (781) 457-1283 or email at kmorgan@t2biosystems.com. We are looking forward to having you on our team!

Sincerely,

/s/ Kelley Morgan

Kelley Morgan
Senior Director, Human Resources

## OFFER OF EMPLOYMENT

Date of employment: Should you accept the terms of this offer, your employment with the Company will commence on May 1, 2017.

Background check: Your employment is contingent upon your successful completion of a background check, which is required for all employees of the Company. The Company will forward you the appropriate documents, and such documents shall be required to be submitted to the Company by no later than one week prior to your start date.

Position: You have been offered the position of Senior Vice President and Chief Financial Officer. In this capacity, you will report to John McDonough, Chief Executive Officer. Your duties and responsibilities will include all those customarily attendant to such a position, and any other such duties or responsibilities that John McDonough or the Company may, from time to time, assign to you. You agree that you shall not enter into any employment endeavors which may conflict with your ability to devote the necessary time and energies to the Company's business interest while engaged by the Company. You further agree to comply with all applicable laws and with all Company rules and policies established by the Company from time to time.

Compensation and Tax Matters: Your salary shall be $14,166.67 (the equivalent of $340,000 when annualized), payable semi-monthly and subject to pro-ration for any partial initial or terminal week during which you are employed, in accordance with normal payroll practices and schedule of the Company.

You will be eligible to receive an annual bonus (the "Annual Bonus") based upon the achievement of specific company and individual milestones as determined by the Board of Directors. The target amount of your Annual Bonus will be 45% of your Base Salary, subject to adjustment by the Board of Directors. Payment of the Annual Bonus will be pro-rated for 2017 and will in all events be subject to your continued employment with the Company through the date of payment.

All compensation amounts stated are before any deductions for FICA taxes, state and federal withholding taxes and other payroll deductions required to be made by the Company under applicable law.

Stock Options: Subject to the approval of the Board of Directors and your execution of the Company's Stock Option Agreement, you will be offered options to purchase 175,000 shares of T2 Biosystems common stock under the Company's 2014 Incentive Award Plan (the "2014 Plan"). The exercise price of the options will be equal to their fair market value on the date of grant (determined in accordance with the 2014 Plan). The stock options will have a 4-year vesting schedule with 25% of the options vesting one year from the vesting commencement date (your start date) and the remaining options vesting in equal monthly installments over the following 36 months. The terms and conditions of such stock option grant are more fully described in the 2014 Plan.

Severance Compensation: Subject to the approval of the Board of Directors and your execution of the attached Change of Control Severance Agreement (the "Change in Control Agreement"), you will be offered certain benefits in the event of a change in control of the Company, as set forth in more detail and defined in the Change in Control Agreement, including severance compensation and the acceleration of certain stock options, each such benefit to be subject to the terms of the Change in Control Agreement.

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In the event your employment is terminated by the Company for reasons other than Cause and unrelated to a Change in Control, both as defined in the Change in Control Agreement, you will be entitled to receive severance benefits in the form of salary continuation and reimbursement for costs associated with COBRA, for a period of six (6) months following the end of your employment.

Fringe Benefits: You will have the opportunity to participate in the Company's fringe benefits program. Currently, these fringe benefits are as follows:

- The Company currently provides contributions toward a medical and dental plan for yourself and immediate family members
- Three (3) weeks paid vacation, Company designated holidays, personal holidays and sick days (see Benefits Summary for more information).
- The Company provides 100% contribution towards Term Life Insurance, Accidental Death and Dismemberment Insurance, and Short and Long-Term Disability Insurance;
- The opportunity to enroll in the Company's 401(k) Investment and Section 125 Plans based on plan eligibility requirements; and
- Pay or reimburse you in accordance with the Company's reimbursement policies from time to time in connection with the performance of your duties for the Company subject to your submission of satisfactory documentation with respect thereto.

The Company reserves the right to amend, delete or change any of its employment policies and/or benefits at any time in its sole discretion.

Non Competition/Non-Disclosure/Invention Assignment Agreement: No later than on the first day of your employment with the Company you will be required to sign the enclosed Non-Competition/Non-Disclosure/Inventions Assignment Agreement ("Obligations Agreement") which includes nondisclosure, inventions ownership, and other provisions that are necessary to protect the Company's confidential information, intellectual; property, trade secrets, and customer relationships. As you may be given access to such protectable interests, your employment is contingent upon your signing the Obligations Agreement. The terms of the Obligations Agreement will survive termination, for whatever reason, of the employment relationship.

Prior Agreements: You acknowledge and confirm that you have provided/disclosed to the Company all restrictive covenants and agreements, including nondisclosure and confidentiality agreements, to which you are a party. You agree that you shall not disclose to the Company or use while an employee of the Company any confidential or trade secret information obtained by you from other persons or employers and shall not bring any property upon the Company premises which has been misappropriated by others. You also acknowledge that the Company expects you to honor any prior obligations to former employers to which you remain bound.
Employment At Will: Although you are being hired as an employee commencing on May 1, 2017, your employment with the Company shall be at will. This means that your employment is not guaranteed for any definite period of time, and you or the Company may terminate your employment relationship with or without notice at any time and for any or no reason or cause. The Company is not bound to follow

Active: 2017

any policy, procedure, or process in connection with employee discipline, employment termination or otherwise.

Entire Agreement: This letter (together with the attached Obligations Agreement and Change in Control Agreement) sets forth the entire understanding between the Company and yourself with respect to your employment by the Company. All prior discussions, negotiations, correspondence and other understandings between you and the Company are superseded, and there are no representations, warranties or undertakings by the Company or you with respect to your employment by the Company, which are not set forth in this letter.

If you agree with the terms of this offer, please acknowledge your understanding and acceptance of this offer by signing where indicated below and return to me along with a completed background check authorization form by 5:00 p.m. ET on April 18, 2017. We look forward to working with you.

Sincerely,

T2 Biosystems, Inc.

By: __/s/ Kelley Morgan_____4/16/2017_____
Kelley Morgan Date
Senior Director, Human Resources

I have read agree with and accept the items contained in this letter.

By: ___/s/ Darlene Deptula-Hicks_____4/16/2017_____
Darlene Deptula-Hicks Date

The Immigration Control and Reform Act of 1986 requires that all new employees complete the I-9 form and submit proof of employment eligibility to work in the United States within the first three days of their start date. If accepting employment the Company will provide you the I-9 form and requests that you present appropriate documents when you report to the Company and a representative of the Company will complete the I-9 form with you. Accordingly, you will have three days from your start date to submit proof of your eligibility to work in the United States.

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**EXHIBIT 10.46**

**T2 BIOSYSTEMS, INC.**

**CHANGE OF CONTROL SEVERANCE AGREEMENT**

May 1, 2017

Darlene Deptula-Hicks
30 Crane Crossing Road
Plaistow, NH 03865

Dear Darlene,

This letter sets forth the agreement between you and T2 Biosystems, Inc. (the "Company") regarding certain terms and conditions of your employment.

1. Severance Compensation. If your employment is terminated either by you with Good Reason within 12 months following a Change of Control, or by the Company without Cause within 3 months preceding or within 12 months following a Change of Control, subject to your executing and delivering to the Company, and not revoking, a release of claims in a form acceptable to the Company (the "Release") within the 30-day period following your termination of employment:

(a) the Company will pay you severance in an amount equal to 12 months of your then current annual base salary, plus a pro-rata share of your target annual cash bonus for the calendar year in which the termination occurs (based on the number of calendar days elapsed prior to the effective date of such termination), payable in equal installments over a period of 12 months (the "Severance Period") in accordance with the Company's payroll practices, commencing on your termination of employment;

(b) if you have been continuously employed by the Company for less than one year as of the date your employment terminates, the vesting schedule of any equity awards of the Company held by you shall automatically be amended to state that all of the options subject to such equity award(s) scheduled to vest within 12 months of the date of your termination shall immediately accelerate and become fully vested, provided that with respect to any such awards intended to constitute "qualified performance based compensation" under Section 162(m) of the Code, whether a Change of Control has occurred shall be determined without regard to clause (iv) of the definition of Change of Control below;

(c) if you have been continuously employed by the Company for at least one year as of the date your employment terminates, all of the outstanding unvested equity awards of the Company held by you shall become fully vested and, if applicable, exercisable as of the date of your termination, provided that with respect to any such awards intended to constitute "qualified performance based compensation" under Section 162(m) of the Code, whether a Change of Control has occurred shall be determined without regard to clause (iv) of the definition of Change of Control below; and

(d) If you timely elect continued group medical and dental insurance coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company will reimburse you for a portion of the applicable premiums, based on the then-current cost-sharing rates for active employees, for you and your eligible dependents during the period commencing on the date of your termination of employment and ending on the earliest to occur of (a) the final day of the Severance Period, (b) the date you and/or your eligible dependents are no longer eligible for COBRA, and (c) the date you become eligible to receive medical insurance coverage from a subsequent employer (and you agree to notify the Company of such eligibility). Notwithstanding the foregoing, if the Company determines that it cannot provide such reimbursement of premiums to you without potentially violating applicable law, the Company shall in lieu thereof provide to you a taxable monthly payment in an amount equal to a portion of the applicable premiums, based on then-current cost-sharing rates for active employees, which payment will be made regardless of whether you elect COBRA continuation coverage and will commence in the month following the month in which your termination of employment occurs and end on the earliest to occur of (x) the final day of the Severance Period, (y) the date you and/or your eligible dependents are no longer eligible for COBRA, and (z) the date you become eligible to receive medical insurance coverage from a subsequent employer (and you agree to notify the Company of such eligibility).

Notwithstanding anything herein to the contrary, in the event that any compensation or benefit that constitutes "nonqualified deferred compensation" within the meaning of Section 409A (as defined below) becomes payable upon the occurrence of a Change of Control, such compensation or benefit shall not be paid unless such Change of Control constitutes a "change in control event" within the meaning of Section 409A.

2. Definitions. For purposes of this letter, the terms "Change of Control," "Cause," and "Good Reason" shall have the following meanings.

(a) "Change of Control" means that any of the following events has occurred:

(i) Any person (as such term is used in Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act")), other than the Company, any employee benefit plan of the Company, or any entity organized, appointed, or established by the Company for or pursuant to the terms of any such plan, together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Exchange Act) becomes the beneficial owner or owners (as defined in Rule 13d-3 and 13d-5 promulgated under the Exchange Act), directly or indirectly (the "Control Group"), of more than 50% of the outstanding equity securities of the Company, or otherwise becomes entitled, directly or indirectly, to vote more than 50% of the voting power entitled to be cast at elections for directors ("Voting Power") of the Company, provided that a Change of Control will not have occurred if such Control Group acquired securities or Voting Power solely by purchasing securities from the Company, including, without limitation, acquisition of securities by one or more third party investors;

(ii) A consolidation or merger (in one transaction or a series of related transactions) of the Company pursuant to which the holders of the Company's equity

securities immediately prior to such transaction or series of related transactions cease to be the holders, directly or indirectly, immediately after such transaction or series of related transactions of more than 50% of the Voting Power of the entity surviving such transaction or series of related transactions;

(iii) The sale, lease, exchange, or other transfer (in one transaction or series of related transactions) of all or substantially all of the assets of the Company; or

(iv) The liquidation or dissolution of the Company or the Company ceasing to do business.

(b) "Cause" means:

(i) Your conviction of a felony, either in connection with the performance of your obligations to the Company or which otherwise materially and adversely affects your ability to perform such obligations;

(ii) Your willful disloyalty to the Company or deliberate material dishonesty to the Company;

(iii) The commission by you of an act of fraud or embezzlement against the Company;

(iv) Your willful, substantial failure to perform any of your duties hereunder or your deliberate failure to follow reasonable, lawful directions of the Company's Board of Directors or your direct supervisor, which failure, if capable of being cured, is not cured within 30 days after delivery to you by the Company of written notice of such failure; or

(v) A material breach by you of any material provision of this letter which breach is not cured within 30 days after delivery to you by the Company of written notice of such breach.

(c) "Good Reason" means one or more of the following:

(i) A material change in the principal location at which you provide services to the Company, without your prior written consent;

(ii) A material and continuing diminution by the Company in the duties, authority or responsibilities of your position which causes such position to become of less responsibility or authority than immediately prior to such material and continuing diminution, provided that such change is not in connection with a termination of your employment hereunder by the Company (for purposes of clarity, if you are not the Chief Financial Officer of the combined public company following the Change of Control, you shall be deemed to have a material diminution of your duties);

(iii) A material reduction in your base salary or other benefits except if such a reduction is in connection with a general reduction in compensation or other benefits of all similarly situated employees of the Company;

(iv) Failure by the Company to obtain the assumption of this Agreement by any successor to the Company.

Notwithstanding the foregoing, Good Reason shall only exist if you have given written notice to the Company within 90 days of the initial existence of the Good Reason condition(s), and the Company has failed to cure such event(s) within 30 days of its receipt of said notice.

3. Section 409A.

(a) *Separation from Service*. Notwithstanding anything in this letter to the contrary, any compensation or benefit payable under this letter that is designated as payable upon your termination of employment shall be payable only upon your "separation from service" with the Company (a "Separation from Service") within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and guidance promulgated thereunder (collectively, "Section 409A"), and except as provided below, any such compensation or benefits shall not be paid, or, in the case of installments, shall not commence payment, until the 30th day following your Separation from Service. Any installment payments that would have been made to you during the 30 day period immediately following your Separation from Service but for the preceding sentence shall be paid to you on the 30th day following your Separation from Service and the remaining payments shall be made as provided in this letter.

(b) *Specified Employee*. Notwithstanding anything in this letter to the contrary, if you are deemed by the Company at the time of your Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which you are entitled under this letter is required in order to avoid a prohibited distribution under Section 409A, such portion of your benefits shall not be provided to you prior to the earlier of (i) the expiration of the six-month period measured from the date of your Separation from Service with the Company or (ii) the date of your death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump-sum to you (or your estate or beneficiaries), and any remaining payments due to you under this letter shall be paid as otherwise provided herein.

(c) *Installments*. Your right to receive any installment payments under this letter shall be treated as a right to receive a series of separate payments and, accordingly, each such installment payment shall at all times be considered a separate and distinct payment as permitted under Section 409A. Except as otherwise permitted under Section 409A, no payment hereunder shall be accelerated or deferred unless such acceleration or deferral would not result in additional tax or interest pursuant to Section 409A.

4. General

(a) No provision of this letter shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by you and by an authorized officer of the Company (other than you). No waiver by either party of any breach of, or of compliance with, any condition or provision of this letter by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time. The validity, interpretation, construction and performance of this letter shall be governed by the laws of the Commonwealth of Massachusetts without regard to conflicts of law. The invalidity or unenforceability of any provision or provisions of this letter shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect. This letter may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

(b) This letter contains the entire and exclusive agreement between the parties with respect to the subject matter hereof and is intended to supersede and replace all previous agreements, negotiations, and representations between the parties, whether written or oral, including any provision of the employment offer letter agreement between you and the Company, dated as of April 18, 2017, to the extent such letter addresses the subject matter hereof.

Sincerely,

T2 BIOSYSTEMS, INC.

By:/s/ John McDonough_____
Name:John McDonough
Title: President & CEO

Acknowledged and Agreed

/s/ Darlene Deptula-Hicks_____
Darlene Deptula-Hicks

**Exhibit 21.1**

Subsidiaries of T2 Biosystems, Inc.:

| **Name** | Jurisdiction of Organization |
| --- | --- |
| T2 Biosystems Securities Corporation | Massachusetts |

**Exhibit 23.1**

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-3 No. 333-206707) of T2 Biosystems, Inc.,
(2) Registration Statement (Form S-3 No. 333-216833) of T2 Biosystems, Inc., and
(3) Registration Statement (Form S-8 No. 333-197946) pertaining to the Amended and Restated 2006 Employee, Director and Consultant Stock Plan, 2014 Incentive Award Plan, and the 2014 Employee Stock Purchase Plan of T2 Biosystems, Inc.

of our report dated March 19, 2018, with respect to the consolidated financial statements of T2 Biosystems, Inc. included in this Annual Report (Form 10-K) of T2 Biosystems, Inc. for the year ended December 31, 2017.

/s/ Ernst & Young LLP

Boston, Massachusetts
March 19, 2018

**Exhibit 31.1**

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John McDonough, certify that:

1. I have reviewed this Annual Report on Form 10-K of T2 Biosystems, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

ate: March 19, 2018

By: /s/ John McDonough
John McDonough
President, Chief Executive Officer and Director

**Exhibit 31.2**

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John Sprague, certify that:

1. I have reviewed this Annual Report on Form 10-K of T2 Biosystems, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 19, 2018

By: /s/ John M. Sprague
John M. Sprague
Principal Financial Officer

**Exhibit 32.1**

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of T2 Biosystems, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2017 (the "Report"), as filed with the Securities and Exchange Commission on or about the date hereof, I, John M. Sprague, Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(i) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 19, 2018

By: /s/ John M. Sprague
John M. Sprague
Principal Financial Officer

By: /s/ John McDonough
John McDonough
President, Chief Financial Officer and
Director

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of T2 Biosystems, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.