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 fiscal year ended December 31, 2017

OR

☐ **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 001-34375

CYTORI THERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

DELAWARE	**33-0827593**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
3020 CALLAN ROAD, SAN DIEGO, CALIFORNIA	**92121**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (858) 458-0900

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	**Nasdaq Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act:
Preferred Stock Purchase Rights

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. 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 (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one).

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☒
Emerging growth company	☐		

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

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

The aggregate market value of the common stock of the registrant held by non-affiliates of the registrant on June 30, 2017, the last business day of the registrant's most recently completed second fiscal quarter, was $36.4 million based on the closing sales price of the registrant's common stock on June 30, 2017 as reported on the Nasdaq Capital Market, of $1.10 per share.

As of January 31, 2018, there were 59,819,615 shares of the registrant's common stock outstanding.

TABLE OF CONTENTS

PART I

Item 1. Business

References to "Cytori," "we," "us" and "our" refer to Cytori Therapeutics, Inc. and its consolidated subsidiaries. References to "Notes" refer to the Notes to Consolidated Financial Statements included herein (refer to Item 8).

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report contains certain statements that may be deemed "forward-looking statements" within the meaning of U.S. securities laws. All statements, other than statements of historical fact, that address activities, events or developments that we intend, expect, project, believe or anticipate and similar expressions or future conditional verbs such as will, should, would, could or may occur in the future are forward-looking statements. Such statements are based upon certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate.

These statements include, without limitation, statements about our anticipated expenditures, including research and development, sales and marketing, and general and administrative expenses; the potential size of the market for our products; future development and/or expansion of our products and therapies in our markets, our ability to generate product or development revenues and the sources of such revenues; our ability to effectively manage our gross profit margins; our ability to obtain regulatory approvals; expectations as to our future performance; portions of the "Liquidity and Capital Resources" section of this report, including our potential need for additional financing and the availability thereof; and the potential enhancement of our cash position through development, marketing, and licensing arrangements. Our actual results will likely differ, perhaps materially, from those anticipated in these forward-looking statements as a result of various factors, including: the early stage of our product candidates and therapies, the results of our research and development activities, including uncertainties relating to the clinical trials of our product candidates and therapies; our need and ability to raise additional cash; the outcome of our partnering/licensing efforts; our joint ventures, risks associated with laws or regulatory requirements applicable to us, market conditions, product performance, potential litigation, and competition within the regenerative medicine field, to name a few. The forward-looking statements included in this report are subject to a number of additional material risks and uncertainties, including but not limited to the risks described under the "Risk Factors" in Item 1A of Part I above, which we encourage you to read carefully

We encourage you to read the risks described under "Risk Factors" carefully. We caution you not to place undue reliance on the forward-looking statements contained in this report. These statements, like all statements in this report, speak only as of the date of this report (unless an earlier date is indicated) and we undertake no obligation to update or revise the statements except as required by law. Such forward-looking statements are not guarantees of future performance and actual results will likely differ, perhaps materially, from those suggested by such forward-looking statements.

This Annual report on Form 10-K refers to trademarks such as Cytori Cell Therapy, Habeo Cell Therapy, Celution, Celase, Intravase, Puregraft and StemSource. Solely for convenience, our trademarks and tradenames referred to in this Form 10-K may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames.

General

Our objective is to build a profitable and growing specialty therapeutics company. To meet this objective, we have acquired and are developing two technology platforms that hold promise for treating millions of patients and represent significant potential for increasing shareholder value. Our current corporate activities fall substantially into advancing these platforms: Cytori Nanomedicine and Cytori Cell Therapy.

The Cytori Nanomedicine platform features a versatile liposomal nanoparticle technology for drug encapsulation that has thus far provided the foundation to bring two promising drugs into mid/late stage clinical trials. Nanoparticle encapsulation is promising because it can help improve the delivery and metabolism of many drugs, thus potentially enhancing the therapeutic profile and patient benefits. Our lead drug candidate, ATI-0918 is a generic version of pegylated liposomal encapsulated doxorubicin. Pegylated liposomal encapsulated doxorubicin is a heavily relied upon chemotherapeutic used in many cancer types on a global basis. We believe that data from a 60-patient European study of ATI-0918 has met the statistical criteria for bioequivalence to Janssen's Caelyx®, the current reference listed drug in Europe. We intend that these bioequivalence data will serve as a basis for our planned regulatory submission to the European Medicines Agency, or EMA, for ATI-0918. We are currently evaluating our strategic options to bring ATI-0918 to the U.S., China, and other markets. Our second nanomedicine drug candidate is ATI-1123, a novel and new chemical entity which is a nanoparticle-encapsulated form of docetaxel, also a workhorse chemotherapeutic drug used for many cancers. A Phase I clinical trial of ATI-1123 has been completed and published, and we are investigating possible expansion of this

trial to Phase II, most likely in conjunction with a development partner. Finally, in connection with our acquisition of the ATI-0918 and ATI-1123 drug candidates, we have acquired know-how (including proprietary processes and techniques) and a scalable nanoparticle manufacturing plant in San Antonio, Texas from which we intend to manufacture commercial quantities of our nanoparticle drugs.

Cytori Cell Therapy, or CCT, is based on the scientific discovery that the human adipose or fat tissue compartment is a source of a unique mixed population of stem, progenitor and regenerative cells that may hold substantial promise in the treatment of numerous diseases and conditions. To bring this promise to health providers and their patients, we are developing novel therapies prepared and administered at the patient's bedside with proprietary technologies that include therapy-specific reusable, automated, standardized Celution devices, single-use Celution consumable sets, Celase reagent, and Intravase reagent. Our lead product candidate, Habeo™ Cell Therapy, was evaluated in a Cytori-sponsored U.S. randomized, placebo-controlled, double-blind, multi-center clinical trial, STAR (**S**cleroderma **T**reatment with Celution Processed **A**dipose Derived **R**egenerative Cells), for the treatment of impaired hand function in patients with scleroderma. On July 24, 2017, we announced top-line, preliminary data and presented the full data analysis on October 18, 2017. The STAR trial enrolled and evaluated 88 patients with scleroderma, including 51 patients within the diffuse cutaneous subset and 37 with limited cutaneous scleroderma. While the primary and secondary endpoints did not reach statistical significance at 24 or 48 weeks, the trial data reported clinically meaningful improvement in the primary and secondary endpoints of both hand function and scleroderma-associated functional disability, for Habeo treated patients compared to placebo, in the pre-specified subgroup of patients with diffuse cutaneous scleroderma. Further, on January 22, 2018, we announced the investigator-initiated and Cytori-supported SCLERADEC-II clinical trial in France using Habeo Cell Therapy completed its enrollment and data is anticipated in the second half of 2018. Additional CCT treatments are in various stages of development in the areas of urology, wounds, and orthopedics. Further, our CCT platform is the subject of investigator-initiated trials conducted by our partners, licensees and other third parties, some of which are supported by us and/or funded by government agencies and other funding sources, detailed in an announcement on November 13, 2017. Currently, we internally manufacture the Celution devices and consumables in the United States and the United Kingdom and source our Celase and Intravase reagents from a third-party supplier. We are exploring contract manufacturing organization options for the Celution System to reduce overhead and product costs of goods sold. We also have obtained regulatory approval to sell some of our CCT products, including our Celution devices and consumables and associated reagents, in certain markets outside the U.S. In those markets, we have been able to further develop and improve our core technologies, gain expanded clinical and product experience and data, and generate sales.

Development Pipeline

Cytori Nanomedicine

In February 2017, we completed our acquisition of the assets of Azaya Therapeutics, Inc., or Azaya, pursuant to the terms of an Asset Purchase Agreement, dated January 26, 2017. Pursuant to the terms of the agreement, we acquired equipment and certain intellectual property, including a portfolio of investigational therapies and related assets, and assumed certain liabilities, from Azaya in exchange for the issuance of 1,173,241 of shares of our common stock in the amount of $2.3 million, assumption of approximately $1.8 million in Azaya's payables, and the obligation to pay Azaya future milestones, earn-outs and licensing fees. The acquisition of Azaya brought two additional product candidates, ATI-0918 and ATI-1123, into the Cytori pipeline and we intend to develop and potentially commercialize both, most likely in conjunction with a commercial partner.

ATI-0918 is a complex generic formulation of the widely used oncology drug, Doxil®/Caelyx®, which is a pegylated liposomal encapsulation of doxorubicin and approved in the U.S. for ovarian cancer, multiple myeloma, and Kaposi's Sarcoma; and in the European Union for breast cancer, ovarian cancer, multiple myeloma, and Kaposi's Sarcoma. The current approval pathway for ATI-0918 is to leverage existing bioequivalence data to Caelyx® for approval in the European Union and to demonstrate bioequivalence to Sun Pharma's Lipodox®, the reference standard, in the U.S. A study to demonstrate ATI-0918's bioequivalence to Caelyx®, for purposes of EMA approval, has been completed and we intend for these data to serve as the basis for our submission of a marketing authorization application for ATI-0918 to the EMA. We are also making plans to perform a bioequivalence study of ATI-0918 compared against Lipodox® to serve as the basis for submission of an abbreviated new drug application, or ANDA, for U.S. FDA approval. We currently anticipate that any U.S. bioequivalence trial for ATI-0918 would be funded by a development partner or licensee.

ATI-1123 is a novel liposomal formulation of docetaxel. Generic forms of docetaxel are currently FDA approved and marketed for non-small cell lung cancer, breast cancer, squamous cell carcinoma of the head and neck cancer, gastric adenocarcinoma, and hormone refractory prostate cancer. Its side effects include hair loss, bone marrow suppression, and allergic reactions. There is currently no form of liposomal docetaxel approved or commercially available. There is a protein (albumin) bound form of a similar chemotherapeutic drug, paclitaxel known as Abraxane®, which demonstrated some clinical advantages to paclitaxel. ATI-1123 has shown promising results in preclinical animal models that suggest it may have superior qualities to docetaxel, including actions against some tumor types that are not amenable to treatment by docetaxel. A Phase I study of ATI-1123 has been completed and

published (Cancer Chemother Pharmacol (2014) 74:1241–1250), in late stage refractory patients and has shown some activity in several tumor types (mostly stable disease). We are currently evaluating opportunities to bring ATI-1123 into Phase II studies in several indications, including small cell lung cancer, via potential development partner or licensee.

Cytori Cell Therapy

The primary near-term goal is for Habeo Cell Therapy to be the first cell therapy product approved for the treatment of impaired hand function in patients with scleroderma, through Cytori-sponsored and supported clinical development efforts.

In the U.S., the STAR clinical trial evaluated the safety and efficacy of a single administration of Habeo Cell Therapy for impaired hand function in patients with scleroderma. The first sites for our STAR trial were initiated in July 2015 and final enrollment of 88 patients was completed in June 2016. As noted above, preliminary assessment of unblinded top-line data show that treatment of ADRC's was safe and while not meeting the primary endpoint for all scleroderma patients, subjects with diffuse scleroderma appeared to exhibit clinically meaningful improvement in several parameters of both hand function and scleroderma-associated functional disability, for Habeo™ treated patients compared to placebo. In Europe, the investigator-initiated and Cytori-supported SCLERADEC-II (Subcutaneous Injection of Autologous Adipose Tissue-derived Stromal Vascular Fraction into the Fingers of Patients with Systemic Sclerosis) clinical trial is evaluating the safety and efficacy of a single administration of Habeo Cell Therapy for impaired hand function in patients with scleroderma. The first sites were initiated in October 2015 and final enrollment of 40 patients was completed in January 2018. Data is anticipated in the second half of 2018.

In Japan, Cytori held an informal consultation meeting with the Pharmaceuticals and Medical Devices Agency, or PMDA, to discuss the feasibility of potential Habeo development strategies and clinical trial designs for a single approval trial based on the results from the U.S. STAR clinical trial. Cytori believes that a single arm 20 patient clinical trial of Habeo Cell Therapy for diffuse scleroderma will be required to obtain approval.

With respect to the remainder of our current CCT clinical pipeline:

- In July 2015, a Japanese investigator-initiated study of ECCI-50 Cell Therapy in men with stress urinary incontinence, or SUI, following prostatic surgery for prostate cancer or benign prostatic hypertrophy, called ADRESU, received approval to begin enrollment from the Japanese Ministry of Health, Labor and Welfare, or MHLW. Details of the ADRESU trial protocol were published in 2017. The basis for initiating ADRESU was a previously completed pilot trial, with short-term results of 11 patients published in 2014 and long-term results of 14 patients presented in 2017. In February 2018, the ADRESU trial had over 90% enrolled. The Japan Agency for Medical Research and Development, or AMED, has provided partial funding for the ADRESU trial.

- We are developing DCCT-10 Cell Therapy for thermal burns under a contract from the Biomedical Advanced Research Development Authority, or BARDA, a division of the U.S. Department of Health and Human Services. In April 2017, we received approval of an Investigational Device Exemption, or IDE, from the U.S. Food and Drug Administration, or FDA, to conduct a pilot clinical trial, RELIEF (Safety and Feasibility of Adipose Derived **R**egenerative C**el**ls (ADRCs) **i**n the Tr**e**atment of Deep Partial Thickness and **F**ull Thickness Thermal Wounds), of DCCT-10 administered intravenously in up to 30 patients with thermal burn injuries at up to 10 U.S. institutions. In May 2017, we announced BARDA's exercise of Option 2 of up to approximately $13.4 million to fund RELIEF. We initiated RELIEF in 2017 and anticipate that the first patient will be treated in the first half of 2018.

In addition to our targeted therapeutic development, we have continued to commercialize our CCT technology under select medical device approvals, clearances and registrations to customers in Asia-Pacific, Europe, Japan and other regions. These customers are a mix of research customers evaluating new therapeutic applications of CCT and commercial customers, including our licensing partners, distributors, and end user hospitals, clinics and physicians, that use our Celution System mostly for treatment of patients in private pay procedures. In Japan, our largest commercial market, we gained increased utilization of our products in the private pay marketplace due to several factors, including increased clarity around the November 2014 Regenerative Medicine Law (implemented in November 2015 as it relates to regenerative medicine products like CCT) and we project that our sales of Celution consumable sets and market presence in Japan will continue to grow in 2018. The sale of Celution devices and consumable sets, reagents, and ancillary products contribute a margin that partially offsets our operating expenses and will continue to play a role in fostering familiarity within the medical community with our technology. It also provides us with valuable product and customer feedback.

Scleroderma

Scleroderma is a rare and chronic connective tissue disease generally classified as an autoimmune rheumatic disorder. An estimated 300,000 Americans have scleroderma, about one-third of whom have the systemic form of the disease, known as systemic sclerosis, or SSc. SSc is further sub-classified as diffuse cutaneous and limited cutaneous SSc. Diffuse subset tends to produce more severe manifestations with significant hand dysfunction and internal organ involvement. Diffuse scleroderma accounts for between one third

and one half of all cases of systemic sclerosis. Women are affected four times more frequently than men and the condition is typically detected between the ages of 30 and 50. More than 90% of scleroderma patients are afflicted with hand involvement that is typically progressive and can result in chronic pain, blood flow changes and severe dysfunction. A small number of treatments are occasionally used off-label for hand scleroderma, but they do little to modify disease progression or substantially improve symptoms with some challenging side-effects. Current treatment options are directed at protecting the hands from injury and detrimental environmental conditions as well as the use of vasodilators. When the disease is advanced, prostanoids, Endothelin-1 receptor antagonists, and immunosuppressants may be used but are often accompanied by side effects. If these medications are unsuccessful, health providers may perform a sympathectomy to remove nerves to increase blood flow and decrease long-term pain.

Some of the first scleroderma patients treated with Cytori Cell Therapy was through SCLERADEC I, a completed, investigator-initiated, 12-patient, open-label, Phase I pilot trial sponsored by Assistance Publique-Hôpitaux de Marseille, or AP-HM, in Marseille, France. The SCLERADEC-I trial received partial support from Cytori. The six-month results were published in the Annals of the Rheumatic Diseases in May 2014 and demonstrated approximately a 50 percent improvement at six months across four important and validated endpoints used to assess the clinical status in patients with scleroderma with impaired hand function. Two-year follow up data in the SCLERADEC I trial was presented at the Systemic Sclerosis World Congress in February 2016 and published in the journal *Current Research in Translational Medicine* in November 2016 and demonstrated sustained improvement in the following four key endpoints: the Cochin Hand Function Scale, or CHFS, the Scleroderma Health Assessment Questionnaire, Raynaud's Condition Score, and hand pain, as assessed by a standard visual analogue scale. Further, on December 5, 2016, we released topline results for three-year follow-up data showing sustained benefits materially consistent with those shown in two-year data.

In 2014, Drs. Guy Magalon and Brigitte Granel, under the sponsorship of AP-HM, submitted a study for review for a follow-up randomized, double-blind, placebo-controlled trial in France using Cytori Cell Therapy, partially supported by Cytori. The trial, named SCLERADEC II, received approval from the French government in April 2015. Enrollment of this trial commenced in October and the last patient treated was in January 2018. We anticipate data in the second half of 2018. Patients will be followed at six-month post-treatment and compared with placebo treated patients. The SCLERADEC II trial includes an open-label crossover arm in which patients originally randomized to the placebo arm may be eligible to be treated with their cryopreserved cells after the aforementioned six-month data have been analyzed and reviewed by an independent monitoring committee. Eligible patients electing to receive treatment with these cryopreserved cells will be followed for both safety and efficacy for six months.

Based on the results of SCLERADEC I, we initiated the STAR trial, a 48-week, randomized, double blind, placebo-controlled pivotal clinical trial of 88 patients at 19 sites in the U.S. to evaluate the safety and efficacy of Habeo Cell Therapy for scleroderma patients with impaired hand function. The STAR trial used the CHFS, a validated measure of hand function, as the primary endpoint measured at 24 weeks and 48 weeks (approximately 6 and 12 months) after a single administration of Habeo Cell Therapy or placebo. Of the 88 patients enrolled in STAR, 51 had diffuse cutaneous scleroderma while 37 had the limited form of the disease.

On July 24, 2017, we announced top-line, preliminary data from the STAR trial. The results from the STAR Trial showed that that treatment of ADRC's was safe and while not meeting the primary endpoint for all SSc patients, subjects with diffuse SSc appeared to exhibit clinically meaningful improvement in several hand parameters of both hand function and scleroderma-associated functional disability, for Habeo™ treated patients compared to placebo. We recently released a more detailed assessment of STAR Trial data at the World Scleroderma Congress this past February. Further, we anticipate feedback from our FDA pre-submission meeting later this quarter, which will provide us with a clearer picture of the optimal path forward with this therapy in the U.S.

In November 2016, the US FDA Office of Orphan Products Development granted Cytori an orphan drug designation for cryopreserved or centrally processed Habeo for scleroderma. In April 2016, the European Commission, acting on the positive recommendation from the European Medicines Agency Committee for Orphan Medicinal Products, issued orphan drug designation to a broad range of Cytori Cell Therapy formulations when used for the treatment of systemic sclerosis under Community Register of Orphan Medicinal Products number EU/3/16/1643.

Stress Urinary Incontinence

Another therapeutic target under evaluation by Cytori, led by the University of Nagoya and three other sites and partially supported by the Japanese MHLW, is stress urinary incontinence in men following surgical removal of the prostate gland, which is based on positive data reported in a peer reviewed journal resulting from the use of ADRCs prepared by our Celution System. The ADRESU trial is a 45 patient, investigator-initiated, open-label, multi-center, single arm trial that was approved by the Japanese MHLW in July 2015 and is being led by both Momokazu Gotoh, MD, Ph.D., Professor and Chairman of the Department of Urology and Tokunori Yamamoto, MD, Ph.D., Associate Professor Department of Urology at University of Nagoya Graduate School of Medicine. ADRESU is based on promising pilot trial data published in the International Journal of Urology in 2014 and presented at the International Continence Society in 2017. The primary endpoint for the ADRESU trial will be the number of patients who experience reduction of urinary leakage volume (as measured by the weight of diaper pads used over 24 hours) 52 weeks after treatment. If the endpoint is successfully achieved, the data will be used to seek approval of Cytori Cell Therapy for this indication. Trial enrollment began in

September 2015, and in February 2018, the trial is over 90% enrolled. Full enrollment is expected by the second quarter of 2018 with top-line results available in late 2018 or 2019. This clinical trial is primarily sponsored and funded by the Japanese government, including a grant provided by AMED.

Cutaneous and Soft Tissue Thermal and Radiation Injuries

We are also developing Cytori Cell Therapy, or DCCT-10, for the treatment of thermal burns. In the third quarter of 2012, we were awarded a contract by BARDA valued at up to $106 million to develop a medical countermeasure for thermal burns. The total award under the BARDA contract has been intended to support all clinical, preclinical, regulatory and technology development activities needed to complete the FDA approval process for use of DCCT-10 in thermal burn injury under a device-based pre-market authorization, or PMA, regulatory pathway and to provide preclinical data in burn complicated by radiation exposure.

Pursuant to this contract, BARDA initially awarded us approximately $4.7 million over the initial two-year base period to fund preclinical research and continued development of our Celution System to improve cell processing. In August 2014, BARDA determined that Cytori had completed the objectives of the initial phase of the contract, and exercised its first contract option in the amount of approximately $12 million. In December 2014 and September 2016, BARDA exercised additional contract options pursuant to which it provided us with $2.0 million and $2.5 million in supplemental funds, respectively. These additional funds supported continuation of our research, regulatory, clinical and other activities required for submission of an IDE request to the FDA for RELIEF, a pilot clinical trial using DCCT-10 for the treatment of thermal burns. In April 2017, we received approval of an IDE from the FDA to conduct a pilot clinical trial of CCT in patients with thermal burn injuries. This trial is referred to as the RELIEF clinical trial. In May 2017, we announced BARDA's exercise of Option 2 of up to approximately $13.4 million to fund RELIEF. We initiated RELIEF in 2017 through amendments to our contract with BARDA, or the Amendments. We anticipate that the first patient will be treated in the first half of 2018.

In accordance with the terms of the Amendments, BARDA will provide us with reimbursement of costs incurred, plus payment of a fixed fee, in the aggregate amount of up to approximately $13.4 million, or the Funding Amount. We are responsible for further costs in excess of the Funding Amount, if any, to meet the objectives of the Pilot Trial. The Amendments also extend the term of the BARDA Agreement and the period of performance of Option 2 of the BARDA Agreement to November 30, 2020.

Sales, Marketing and Service

Cytori Nanomedicine™

Our Cytori Nanomedicine pipeline includes both early and late stage nanomedicine product candidates, patented liposomal encapsulated docetaxel (ATI-1123) and generic pegylated liposomal encapsulated doxorubicin (ATI-0918), respectively. We are actively seeking regional and global partnerships with either leading pharmaceutical companies or wholesale distributors for both of these product candidates, with priority on ATI-0918 in Europe where a generic form of liposomal doxorubicin is neither approved nor available.

Cytori Cell Therapy

We sell Celution cell processing systems, or Celution Systems, StemSource cell and tissue banking systems, or StemSource Systems, and surgical accessories and instrumentation to hospitals, clinics, physicians, researchers and other customers for commercial and research purposes, including performance of investigator-initiated studies. Our proprietary enzymatic reagents, which we market and sell under the brand names Celase and Intravase, are sold as part of our Celution Systems and StemSource Systems (with respect to Celase), or under certain circumstances, are sold separately.

We sell our Celution and StemSource Systems through a combination of a direct sales force, third-party distributors, independent sales representatives, and licensees. Our strategy is to grow and leverage our installed base of Celution and StemSource devices at cell processing facilities, clinics, hospitals and research labs to drive recurring sales of our proprietary consumable sets and gain valuable customer feedback. To increase product familiarity and usage among current customers, we launch product enhancements, expand the approved indications for use, perform clinical and technical training, provide on-site case support, and facilitate facility-level licensing with regional and/or national regulatory bodies.

In Japan, we sell our products through our wholly owned subsidiary, Cytori Therapeutics, K.K., which has a direct sales capability. We currently intend to increase our direct sales personnel in Japan over time. In the Bahamas, Chile, Europe, South Korea, Russia and Vietnam, we sell our full product portfolio either directly to customers or through numerous third-party distributors. In the U.S., we are limited to selling only research reagents and surgical accessories and instrumentation directly to

customers. Bimini Technologies, LLC, through its wholly owned subsidiary Kerastem Technologies, LLC, has a global exclusive license to sell our Celution cell processing systems for hair applications. Lorem Vascular has an exclusive license to sell our full product portfolio in all fields of use, excluding hair applications, in Australia, China, Hong Kong, Malaysia and Singapore. We also have engaged with partners to potentially leverage Managed Access Programs (also known as early access program or named patient programs) in various locations.

As of December 31, 2017, we had two individuals in our global marketing team responsible for market assessments and business plans, competitive intelligence, distribution strategy, product management, social media and websites, forecasting, pricing and reimbursement, customer communication, relationship management, events and trade shows, and service. We create awareness of and demand for our products among physicians and researchers through digital advertising, e-marketing campaigns, webinars, pre-clinical and clinical publications, patient advocacy group partnerships, sales collateral, and industry and medical society meetings.

As of December 31, 2017, we had two Cytori employees/contractors in our field service team responsible for providing Celution and StemSource installations, maintenance, training, troubleshooting, and hardware and software update/upgrade services to new and existing customers. This team also initiates and closes sites participating in Cytori-sponsored clinical trials.

For the year ended December 31, 2017, our sales were concentrated with respect to five direct customers, which comprised 68% of our product revenue recognized. One licensee and one direct customer accounted for 77% of total outstanding accounts receivable (excluding receivables from BARDA) as of December 31, 2016.

Customers and Partners

In Japan, Europe, the Middle East, the Asia-Pacific region and Latin America, we offer our Cytori Systems and StemSource Systems through direct sales representatives, distributors and licensing partners, to hospitals, clinics and researchers, including for purposes of performing investigator-initiated and funded studies.

Pursuant to our Sale and Exclusive License/Supply Agreement with Bimini Technologies, LLC, or Bimini Agreement, we granted Bimini a global exclusive license to our Cytori Cell Therapy devices and consumable products for hair applications only, excluding systemic or intravascular delivery of adipose-derived regenerative cells, or ADRCs. Hair loss affects more than 40 million men and 21 million women in the U.S. alone. The global hair loss treatment market generates more than $7 billion annually and currently has limited options for men (grades I-III) and women (grades I-II) with early stage hair loss. Through Kerastem, its wholly owned subsidiary, Bimini completed a FDA-approved Phase II multi-center, randomized, single-blinded, and controlled clinical trial in the U.S., called STYLE (A Trial of Cell Enriched Adipose For Androgenetic Alopecia), to study the safety and feasibility of Kerastem's therapy for female and male pattern baldness. The Kerastem therapy is a one-time treatment that utilizes adipose (fat) derived regenerative cells combined with purified fat delivered to the affected area of scalp. In September 2016, Bimini announced completion of its STYLE trial enrollment of 70 patients at four clinical trial sites within the U.S. In December 2017, Bimini announced six-month top-line data from STYLE. The low dose ADRC plus Puregraft fat treatment group achieved a statistically significant increase in mean terminal hair count, when compared to control, in men with early stage hair loss (Norwood Grades I-III). An average increase of 29 terminal hairs per cm^2 of scalp was observed, corresponding to a 17% increase ($p < 0.05$) from baseline. All treatment arms of STYLE were safe with no serious adverse events reported. Outside of the United States, Bimini is engaged in market development efforts in Europe and Japan for the hair market. The Kerastem Hair Therapy is CE mark approved in the EU for sales to patients with alopecia, or hair loss. Under the Bimini Agreement, Bimini is required, among other things, to pay an eight percent (8%) royalty on its net sales of our products for contemplated hair applications.

Pursuant to our Amended and Restated License/Supply Agreement, or Lorem Agreement, with Lorem Vascular Pte. Ltd., or Lorem Vascular, we granted Lorem Vascular an exclusive license in all fields of use (excluding hair applications subject to Bimini's license) to our Cytori Cell Therapy products for sale into China, Hong Kong, Malaysia, Singapore and Australia. In April 2015, Cytori and Lorem Vascular announced that China Food and Drug Administration had granted regulatory clearance to the Celution System. Under the Lorem Agreement, Lorem Vascular committed to pay up to $500 million in license fees in the form of revenue milestones. In addition, Lorem Vascular is required to pay Cytori 30% of their gross profits in China, Hong Kong and Malaysia for the term of the Lorem Agreement. Lorem Vascular has certain minimum product purchase obligations, including purchase obligations triggered by achievement of applicable regulatory clearance for our products in China, which regulatory clearance was achieved as of April 2015. Lorem Vascular has partially satisfied these related product purchase obligations, and as a result, we are currently in discussions with Lorem Vascular regarding restructuring of its obligations and our rights under the Lorem agreement. We cannot guarantee that our restructuring discussions with Lorem Vascular will be successful. Should we be unable to conclude these negotiations to our satisfaction, a dispute may ensue. See, also, our discussions of the regulatory landscape in China for our products as well as discussions regarding our relationship with Lorem Vascular in the "Risk Factors" section and in the "Competition" and "Governmental Regulation" sections of this "Business" section below.

Refer to Note 2 of the Notes to Consolidated Financial Statements for a discussion of geographical concentration of sales.

Manufacturing

Cytori Nanomedicine

We are in the process of obtaining facility validations at our recently acquired nanoparticle manufacturing facility located in San Antonio, Texas. Once validation is complete, the facility and processes are designed to comply with cGMP per FDA and EMA regulations to manufacture drug candidates for clinical, research, development and commercial use. Upon approval of our drug candidates, our manufacturing capabilities will include validated manufacturing processes for drug product as well as a quality assurance product release process with the ability to ultimately scale-up the process to meet increasing market demands. We believe our strategic investments in the analytical and manufacturing capabilities, including personnel from drug discovery through drug development, will allow us to advance our product candidates more quickly. Expertise gained in manufacturing ATI-0918 may be applied to other formulations in the future, further leveraging our capabilities. Our San Antonio facility enables us to produce drug substance in a cost-effective manner while retaining control over the process and timing. As needed, the use of a qualified Clinical Manufacturing Organization may be utilized to perform various manufacturing processes as we deem appropriate to meet our operational objectives.

Our current principal suppliers for our Cytori Nanomedicine business are LGM Pharma, which supplies our active pharmaceutical ingredient, or API (doxorubicin HC1), as well as Lipoid, LLC and Dishman Netherlands, B.V., which supply us with other raw materials used in the manufacture of our ATI-0918 and ATI-1123 drug candidates. Each of these suppliers is currently a sole source supplier.

Cytori Cell Therapy

We currently manufacture Celution Systems in our headquarters in San Diego, California. As a part of our September 2017 corporate restructuring, we are in the process of consolidating manufacturing of our disposable systems to a single third party manufacturer. We have sufficient inventory on hand to meet global demand while we execute and complete our outsourcing plan. As a manufacturer, our products are subject to periodic inspection by regulatory authorities and distribution partners. Manufacturers of devices and products for human use are subject to regulation and inspection from time to time by the FDA for compliance with the FDA's Quality System Regulation, or QSR, requirements, as well as equivalent requirements and inspections by state and non-U.S. regulatory authorities, such as Notified Bodies in Europe and the California Food and Drug Branch.

Raw materials for the Celution device, Celution consumable kit and other products are sourced from a variety of suppliers. Most of these components are available from multiple vendors either as off-the-shelf items or as custom fabrication. However, we purchase our Celase and Intravase regents exclusively from Roche Diagnostics Corporation, or Roche. While we have significant inventory of these reagents in inventory, we do not have a second source to provide us with these reagents should our supply arrangement with Roche terminate or be suspended, or should Roche be unable to meet its supply obligations thereunder.

Competition

We compete primarily on the basis of the safety and efficacy of our therapies across a broad range of clinical indications to address significant unmet medical and market needs, supported by our brand name, pricing, products, published clinical data, regulatory approvals, and reimbursement. We believe that our continued success depends on our ability to:

- Develop and innovate our product and technology platforms;
- Initiate new and advance existing clinical development programs;
- Secure and maintain regulatory agency approvals;
- Build and expand our commercial footprint;
- Produce high quality products per our specifications and in line with customer expectations
- Achieve improved economies of scale and scope;
- Generate and protect intellectual property;
- Hire and retain key talent; and
- Successfully execute acquisition, licensing, and partnership activities.

Cytori Nanomedicine

ATI-0918, our generic pegylated liposomal encapsulated doxorubicin product candidate is expected to face competition from both patented and generic nanomedicine products for the treatment of breast cancer (BC), ovarian cancer (OC), multiple myeloma (MM), and/or Kaposi's Sarcoma (KS) in all geographies. New nanoparticle-doxorubicin monotherapies and drug combination therapies

represent next generation approaches intended to be safer and more effective than today's patented and generic pegylated liposomal doxorubicin (PLD).

U.S.				
Company	**Product**	**Formulation**	**Stage**	**Indications**
JNJ Janssen	DOXIL	PLD	Commercial	BC, OC, MM, KS
Sun	Lipodox	PLD	Commercial	BC, OC, MM, KS
Dr. Reddy's	Doxorubicin HCl Liposome	PLD	Commercial	BC, OC, MM, KS
Ipsen	Doxorubicin Liposome	PLD	ANDA Submitted	BC, OC, MM, KS
Fudan Zhangjiang	Libod	PLD	BE Study vs Sun Lipodox	OC
Tolmar	Doxorubicin HCl Liposome	PLD	BE Study vs Sun Lipodox	OC
Panacea Biotech	Doxorubicin HCl Liposome	PLD	BE Study vs Sun Lipodox	OC
Emcure	Doxorubicin HCl Liposome	PLD	BE Study vs Sun Lipodox	OC
Cadila	Doxorubicin HCl Liposome	PLD	BE Study vs Sun Lipodox	OC
Cipla	Doxorubicin HCl Liposome	PLD	BE Study vs Sun Lipodox	OC
Auromedics	Doxorubicin HCl Liposome	PLD	BE Study vs Sun Lipodox	OC

Europe				
Company	**Product**	**Formulation**	**Stage**	**Indications**
JNJ Janssen	CAELYX	PLD	Commercial	BC, OC, KS
Teva	Myocet	Non-PLD	Commercial	Breast (with cyclophosphamide)
Taiwan Liposome Co	Doxisome	PLD	MAA Submitted	BC, OC
Sun Pharma	Lipodox	PLD	BE Study vs Janssen CAELYX	BC, OC
Dr. Reddy's	Doxorubicin HCl Liposome	PLD	BE Study vs Janssen CAELYX	BC, OC
Teva	Doxorubicin HCl Liposome	PLD	BE Study vs Janssen CAELYX	BC, OC

Rest of World					
Country	**Company**	**Product**	**Formulation**	**Stage**	**Indications**
China	Fudan Zhangjiang	Libod	PLD	Commercial	BC, OC, KS
China	CSPC	Duomeisu	PLD	Commercial	BC, OC, KS, MM, lymphoma
China	Changzhou Jinyuan	Lixing	PLD	Commercial	
Hong Kong	NAL Pharma	NAL1872	PLD	Preclinical	BC, OC, KS
India	Intas Pharma	Pegadria	PLD	BE Study vs DOXIL	BC, OC, KS
India	Alkem Labs	Lipisol	PLD	Commercial	
India	Celon Labs	Lippod	PLD	Commercial	BC, OC, MM, KS
India	Cipla	Oncodox PEG	PLD	Commercial	BC, OC, MM, KS
India	Natco Pharma	Natdox-LP	PLD	Commercial	OC
India	SRS Pharma	Dox HCl Liposome	PLD	Commercial	BC, OC, KS
India	Parenteral Drugs	Doxopar	PLD	Commercial	BC, OC, KS
India	Zuventus	Rubilong	PLD	Commercial	BC, OC, KS
India	Zydus Cadila	Nudoxa	PLD	Commercial	BC, OC, KS
Japan	JNJ Janssen	DOXIL	PLD	Commercial	OC, KS
Philippines Sri Lanka Taiwan Thailand Vietnam	TTY Biopharm	Lipo-dox	PLD	Commercial	BC, OC, MM, KS
Philippines Sri Lanka Taiwan Thailand Vietnam	TTY Biopharm	CAELYX II	PLD	Development	BC, OC, MM, KS
Russia	Oasmia	Doxophos	Nanoparticle doxorubicin	Commercial	BC, OC, MM, others

Our ATI-1123 product candidate is expected to face competition from both Sanofi's Taxotere, which is approved for 11 indications and available in 90 countries with a majority of sales from China, Japan, Korea, and Taiwan, and generic docetaxel which is available from major suppliers in the U.S., Europe and Japan including, but not limited to, Accord, Actavis, Dr. Reddy's Labs, GLS Pharma, Hospira, Sun Pharma, Teva, and Winthrop. Further competition may result from advances made by companies currently developing nanoparticle-docetaxel products including, but not limited to, Adocia, Cristal Therapeutics, Merrimack, and Oasmia Pharmaceutical.

Cytori Cell Therapy

According to the Alliance for Regenerative Medicine, there over 700 companies worldwide and 801 clinical trials underway within the global regenerative medicine market. Per Allied Market Research, this market is projected to reach $30.2 billion by 2022 and to be dominated by the cell therapy segment.

Today, we compete directly against companies within the autologous adipose-derived cell therapy segment offering manual, semi-automated, or full automated cell processing and/or banking systems used with or without tissue dissociation reagents. Our primary competitors include, but are not limited to, Adisave, Biosafe Group, GID Group, Healeon Medical, Human Med AG, InGeneron, Medikan International, PNC International, SERVA Electrophoresis GmbH, and Tissue Genesis. None of these companies are conducting clinical trials for the treatment of hand dysfunction in scleroderma patients. However, they are engaged in a number of clinical trials around the world.

Company	**Clinical Trial**		
	Affiliation	**Location**	**Indication**
Adisave	Sponsor	Canada	Wounds and Soft Tissue Defects
GID Group	Sponsor	U.S.	Alopecia
GID Group	Sponsor	U.S.	Erectile Dysfunction
GID Group	Sponsor	U.S.	Knee Osteoarthritis
Healeon Medical	Sponsor	U.S.	Alopecia
Healeon Medical	Sponsor	U.S.	Chronic Obstructive Pulmonary Disease
Healeon Medical	Sponsor	U.S.	Inflammatory Bowel Disease
Healeon Medical	Sponsor	U.S.	Neurological Disorders and Disease
Healeon Medical	Sponsor	U.S.	Systemic Pain Conditions
Healeon Medical	Sponsor	U.S., Honduras	Multiple Sclerosis
Human Med AG	Co-Collaborator	France	Knee Osteoarthritis
InGeneron	Sponsor	U.S.	Rotator Cuf Tears
InGeneron	Sponsor	U.S.	Chronic Venous Leg Ulcers
Tissue Genesis	Sponsor	U.S.	Critical Limb Ischemia
Tissue Genesis	Collaborator	U.S.	Rotator Cuff Tears

A study published in 2016 reported that there were 570 medical clinics in the U.S. advertising and offering stem cell treatments, including those derived from adipose tissue, directly to patients. It is unclear whether the FDA will allow these clinics to continue to operate in this fashion and whether they will pose a threat to our business if and at such time that we obtain PMA approval to commercialize Habeo Cell Therapy in the U.S.

In the future, we also anticipate encountering competition from companies developing and offering drugs for the treatment of scleroderma including, but not limited to, Actelion Pharmaceuticals, Allergan, Apricus Biosciences, Bayer, Corbus Pharmaceuticals, Covis Pharma, CSL Behring, Genentech, and United Therapeutics. No companies today have approved drugs indicated for improving hand function in scleroderma patients while only Tracleer® (Bosentan) is approved in Europe for the prevention of new digital ulcers in scleroderma patients. Habeo Cell Therapy is expected to compete with or be used in conjunction with second and/or third line therapies including, but not limited to, phosphodiesterase inhibitors, botulinum toxin A, angiotensin II receptor blockers, ACE inhibitors, alpha blockers, selective serotonin reuptake inhibitors, topical nitrates, IV prostanoids, endothelin receptor antagonists, immunosuppressants, and surgical interventions.

Research and Development

Research and development expenses were $11.7 million and $16.2 million for the years ended December 31, 2017 and 2016, respectively. These expenses have supported the basic research, product development and clinical activities necessary to bring our products to market.

Our research and development efforts in 2017 focused predominantly on the following areas:

- Completion of enrollment in the STAR (hand manifestation of scleroderma) trial and data analysis and trial close out costs related to our previous conducted Phase IIACT-OA (knee osteoarthritis) trial;
- Support of ongoing preclinical and other research activities towards BARDA contract milestones;
- Support of the investigator initiated trials ADRESU in Japan and SCLERADEC-II in France;
- Planning and development of next generation Celution Cell Therapy products, including detailed product roadmaps for the device, consumables and accessories;
- Development of new configurations and expanded functionality of our Celution platform to address the current Japanese regulatory approval as a medical device (Japan Class I) and other markets;
- Conduct ADRC viability and transport studies in support of clinical trial requirements;
- Conduct presentation and publishing of research efforts related to ADRC characterization and potency to further establish scientific leadership in the field; and
- Continued optimization and development of the Celution System family of products and next-generation devices, single-use consumables and related instrumentation.

Intellectual Property

Our success depends in large part on our ability to protect our proprietary technology, including the Celution System product platform, and to operate without infringing on the proprietary rights of third parties. We rely on a combination of patent, trade secret, copyright and trademark laws, as well as confidentiality agreements, licensing agreements and other agreements, to establish and protect our proprietary rights. Our success also depends, in part, on our ability to avoid infringing patents issued to others. If we were judicially determined to be infringing on any third-party patent, we could be required to pay damages, alter our products or processes, obtain licenses or cease certain activities.

To protect our proprietary medical technologies, including the Celution System platform and other scientific discoveries, we have a portfolio of over 100 issued patents worldwide. We currently have 34 issued U.S. patents and 68 issued international patents. Of the 34 issued U.S. patents, eight were issued in 2017. Of the 68 issued international patents, seven were issued in 2017. In addition, we have over 45 patent applications pending worldwide related to our Cytori Cell Therapy and Nanomedicine technologies. We are seeking additional patents on methods and systems for processing adipose-derived stem and regenerative cells, on the use of adipose-derived stem and regenerative cells for a variety of therapeutic indications, including their mechanisms of action, on compositions of matter that include adipose-derived stem and regenerative cells, and on other scientific discoveries. Regarding our Cytori Nanomedicine program, as part of our asset acquisition transaction with Azaya Therapeutics, we acquired Azaya Therapeutics' patent portfolio consisting of two issued patents, one pending patent application and valuable proprietary liposome manufacturing know-how. Since the Azaya asset acquisition, we have filed one patent application relating to Cytori Nanomedicine, and intend to actively continue to enhance our nanomedicine portfolio.

We cannot assure that any of our pending patent applications will be issued, that we will develop additional proprietary products that are patentable, that any patents issued to us will provide us with competitive advantages or will not be challenged by any third parties or that the patents of others will not prevent the commercialization of products incorporating our technology. Furthermore, we cannot assure that others will not independently develop similar products, duplicate any of our products or design around our patents. U.S. patent applications are not immediately made public, so we might be surprised by the grant to someone else of a patent on a technology we are actively using.

There is a risk that any patent applications that we file and any patents that we hold or later obtain could be challenged by third parties and declared invalid or infringing of third party claims. For many of our pending applications, patent interference proceedings may be instituted with the U.S. Patent and Trademark Office, or the USPTO, when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the USPTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the USPTO's decision is subject to appeal. This means that if an interference proceeding arises with respect to any of our patent applications, we may experience significant expenses and delay in obtaining a patent, and if the outcome of the proceeding is unfavorable to us, the patent could be issued to a competitor rather than to us. Third parties can file post-grant proceedings in the USPTO, seeking to have issued patent invalidated, within nine months of issuance. This means that patents undergoing post-grant proceedings may be lost, or some or all claims may require amendment or cancellation, if the outcome of the proceedings is unfavorable to us. Post-grant proceedings are complex and could result in a reduction or loss of patent rights. The institution of post-grant proceedings against our patents could also result in significant expenses.

Patent law outside the United States is uncertain and in many countries, is currently undergoing review and revisions. The laws of some countries may not protect our proprietary rights to the same extent as the laws of the United States. Third parties may attempt to oppose the issuance of patents to us in foreign countries by initiating opposition proceedings. Opposition proceedings against any of our patent filings in a foreign country could have an adverse effect on our corresponding patents that are issued or pending in the United States. It may be necessary or useful for us to participate in proceedings to determine the validity of our patents or our competitors' patents that have been issued in countries other than the United States. This could result in substantial costs, divert our efforts and attention from other aspects of our business, and could have a material adverse effect on our results of operations and financial condition. We currently have pending patent applications or issued patents in Europe, Brazil, Mexico, India, Russia, Australia, Japan, Canada, China, Korea and Singapore, among others.

In addition to patent protection, we rely on unpatented trade secrets and proprietary technological expertise. We cannot assure you that others will not independently develop or otherwise acquire substantially equivalent techniques, somehow gain access to our trade secrets and proprietary technological expertise or disclose such trade secrets, or that we can ultimately protect our rights to such unpatented trade secrets and proprietary technological expertise. We rely, in part, on confidentiality agreements with our marketing partners, employees, advisors, vendors and consultants to protect our trade secrets and proprietary technological expertise. We cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that our unpatented trade secrets and proprietary technological expertise will not otherwise become known or be independently discovered by competitors.

Government Regulation – Nanoparticle Oncology Drugs

Our nanoparticle oncology drug products must receive regulatory approvals from the EMA and the FDA and from other applicable governments prior to their sale.

Our current and future nanoparticle oncology drugs are, or will be, subject to stringent government regulation in the United States by the FDA under the Federal Food, Drug and Cosmetic Act. The FDA regulates the design/development process, clinical testing, manufacture, safety, labeling, sale, distribution, and promotion of oncology drugs. Included among these regulations are drug approval requirements and the current Good Manufacturing Practices, cGMP. Other statutory and regulatory requirements govern, among other things, cGMP inspection, prohibitions against misbranding and adulteration, labeling and post-market reporting. The recent CURES Act legislation regarding drugs in the United States has yet to be implemented and may yield additional regulatory requirements on therapeutic drugs while providing some relief in selected regulatory burdens. The FDA's interpretation and implementation of the CURES Act has yet to be published.

Our nanoparticle oncology drugs must also comply with the government regulations of each individual country in which the products are to be distributed and sold. These regulations vary in complexity and can be as stringent, and on occasion even more stringent, than FDA regulations in the United States. International government regulations vary from country to country and region to region. For instance, our ATI-0918 drug candidate relies on an expedited approval process referred to as 'bioequivalence' or BE approved under an ANDA. ANDA and BE products require a 'reference drug', 'reference standard', or RS, and/or 'reference listed drug', or RLD, to with which to show equivalence. The reference drug may not be the same in all territories or countries, which could require different and unique BE clinical studies for some territories. Furthermore, the level of complexity and stringency is not always precisely understood today for each country, creating greater uncertainty for the international regulatory process. Additionally, government regulations can change with little to no notice and may result in the elimination of the BE regulatory pathway in some regions, creating increased regulatory burden.

Worldwide, the regulatory process can be lengthy, expensive, and uncertain with no guarantee of approval. Before any new drugs may be introduced to the U.S. market, the manufacturer generally must obtain FDA approval through either ANDA process for generic drugs off patent that allow for bioequivalence to and existing reference listed drug, or the lengthier new drug approval (NDA) process, which typically requires multiple successful Phase III clinical trials to generate clinical data supportive of safety and efficacy along with extensive pharmacodynamic and pharmacokinetic preclinical testing to demonstrate safety. Approval of an ANDA could take four or more years from the time the development process is initiated due to the requirement for clinical trials. NDA drugs could take significantly longer due to the additional preclinical requirements along with the typical requirement for two successful Phase III clinical trials.

Our lead ATI-0918 drug candidate is eligible for the ANDA regulatory pathway in the U.S., while our ATI-1123 drug candidate is subject to the significantly lengthier NDA process. Changes to the RS and RLD for drugs eligible for the ANDA process can result in significant delays in the regulatory process as BE clinical studies may need to be repeated for regions / countries that no longer recognize the RS or RLD utilized in BE clinical studies. Failure to comply with applicable requirements can result in application integrity proceedings, fines, recalls or seizures of products, injunctions, civil penalties, total or partial suspensions of production, withdrawals of existing product approvals, refusals to approve new applications or notifications, and criminal prosecution.

Drugs are also subject to post-market reporting requirements for deaths or serious injuries when the drug may have caused or contributed to the death or serious injury, or serious adverse events. If safety or effectiveness problems occur after the drug reaches the market, the FDA may take steps to prevent or limit further marketing of the drug. Additionally, the FDA actively enforces regulations prohibiting marketing and promotion of drugs for indications or uses that have not been approved by the FDA.

We must comply with extensive regulations from foreign jurisdictions regarding safety, manufacturing processes and quality. These regulations, including the requirements for marketing and authorization, may differ from the FDA regulatory scheme in the United States.

Government Regulation – Medical Devices

As a specialty therapeutics company, we operate under stringent regulations and our companies and products are subject to a variety of distinct regulations around the world that are subject to modification or change.

Cytori Cell Therapy

Cytori Cell Therapy technology is regulated through a variety or agencies and approaches around the world. Our products must receive regulatory clearances or approvals from regulatory bodies such as the EMA in the European Union, the FDA in the U.S., PMDA and MHLW in Japan, and the China Food and Drug Administration in China and from other applicable governments prior to their sale or in some cases prior to clinical trials. This technology platform incorporates multiple elements including devices, reagents and software that in combination yield an autologous cellular product. As a result of the complex nature of our products and differing regulations through the world, there is no single unified of global set of regulatory requirements or common approach to regulation and is therefore region specific.

Cytori Cell Therapy technology is, and will be, subject to stringent government regulation in the United States by the FDA under the Federal Food, Drug and Cosmetic Act. The FDA regulates the design/development process, clinical testing, manufacture, safety, labeling, sale, distribution and promotion of medical devices and drugs. Included among these regulations are pre-market clearance and pre-market approval requirements, design control requirements, and the requirements to comply with Quality System Regulations/Good Manufacturing Practices. Other statutory and regulatory requirements govern, among other things, registration and inspection, medical device listing, prohibitions against misbranding and adulteration, labeling and post-market reporting. In the U.S., we must currently obtain FDA clearance or approval through the PMA application process, which requires clinical trials to generate clinical data supportive of safety and efficacy. Approval of a PMA could take four or more years from the time the process is initiated due to the requirement for clinical trials. Failure to comply with applicable requirements can result in application integrity proceedings, fines, recalls or seizures of products, injunctions, civil penalties, total or partial suspensions of production, withdrawals of existing product approvals or clearances, refusals to approve or clear new applications or notifications, and criminal prosecution.

Recently, the U.S. government enacted the 21st Century Cures Act, or the CURES Act, in the United States that has many provisions that could be favorable for us. However, the provisions of the CURES Act are broad and lack enough detail currently to determine its effect on our regulatory pathway. Further interpretation and implementation of the CURES Act must occur before any definitive assessments can be made.

Outside the U.S., the Cytori Cell Therapy family of products must also comply with the government regulations of each individual country in which the products are to be distributed and sold. These regulations vary in complexity and can be as stringent, and on occasion even more stringent, than FDA regulations in the United States. International government regulations vary from country to country and region to region. For example, regulations in some parts of the world only require product registration while other regions/countries require a complex product approval process. Due to the fact that there are new and emerging cell therapy and cell banking regulations that have recently been drafted and/or implemented in various countries around the world, the application and subsequent implementation of these new and emerging regulations have little to no precedent. Furthermore, the level of complexity and stringency is not always precisely understood today for each country, creating greater uncertainty for the international regulatory process. Furthermore, government regulations can change with little to no notice and may result in up-regulation of our products, thereby, creating a greater regulatory burden for our cell processing and cell banking technology products.

In Europe, Cytori Cell Therapy is CE Mark approved as the Celution device and consumable product and is sold for commercial and research use. Expansion of use of Cytori Cell Therapy in Europe will likely require an expansion of our regulatory claims that would likely include disease-specific claims obtained through the completion of clinical trials. It is possible that Cytori Cell Therapy may be regulated as a device, similar to its regulatory pathway in the U.S., or as an advanced tissue medicinal product or ATMP, or some combination of the two in Europe. Cytori is currently working with both European authorities and country-specific competent authorities to clarify the proper path for Cytori's Habeo Cell Therapy in Europe.

Regulations in the Asia-Pacific and Japan regions are currently evolving for cell therapy products. For example, the Japan Diet enacted a regenerative medicine law in November of 2014 following sweeping changes in Japan's medical device regulations in 2014. In China, the regulatory landscape for cell therapies such as ours is subject to increasing regulation, and success in this market will depend heavily on a firm understanding of applicable regulations and a commitment to pursuing appropriate regulatory approvals, including any required approvals from the National Health and Family Planning Commission of the People's Republic of China, and other governmental entities. These regulatory uncertainties further complicate the regulatory process in the Asia-Pacific region and may lengthen approval timelines and/or market entrance or penetration.

Regulatory Developments

EU Orphan Designation

In April 2015, the European Commission, acting on the positive recommendation from the European Medicines Agency Committee for Orphan Medicinal Products, granted an orphan drug designation to Assistance Publique Hopitaux du Marseille (France), the sponsor institution for the SCLERADEC I and SCLERADEC II trials using Cytori Cell Therapy, for the treatment of systemic sclerosis.

In April 2016, the European Commission, acting on the positive recommendation from the European Medicines Agency Committee for Orphan Medicinal Products, granted orphan drug designation to a broad range of Cytori Cell Therapy formulations when used for the treatment of systemic sclerosis under Community Register of Orphan Medicinal Products number EU/3/16/1643.

In November 2016, the U.S. FDA Office of Orphan Products Development granted Cytori an orphan drug designation for cryopreserved or centrally processed ECCS-50 Habeo for scleroderma.

Employees

As of December 31, 2017, we had 37 full-time employees. Of these full-time employees, three were engaged in manufacturing, 13 were engaged in research and development, seven were engaged in sales and marketing and eight were engaged in management, finance and administration. From time to time, we also employ independent contractors to support our operations. Our employees are not represented by any collective bargaining agreements and we have never experienced an organized work stoppage.

Corporate Information and Web Site Access to SEC Filings

We were initially formed as a California general partnership in July 1996, and incorporated in the State of Delaware in May 1997. We were formerly known as MacroPore Biosurgery, Inc., and before that as MacroPore, Inc. Our corporate offices are located at 3020 Callan Road, San Diego, CA 92121. Our telephone number is (858) 458-0900. We maintain a website at www.cytori.com. Through this site, 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 amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934, or the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission, or the SEC. In addition, we publish on our website all reports filed under Section 16(a) of the Exchange Act by our directors, officers and stockholders owning more than 10% of our outstanding common stock. These materials are accessible via the Investor Relations—Reports and Filings section of our website within the "SEC Filings" link. Some of the information is stored directly on our website, while other information can be accessed by selecting the provided link to the section on the SEC website, which contains filings for our company and its insiders.

The public can also obtain any documents that we file with the SEC at http://www.sec.gov. The public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Item 1A. Risk Factors

In analyzing our company, you should consider carefully the following risk factors together with all of the other information included in this Annual Report on Form 10-K, including our audited Consolidated Financial Statements and the related notes and "Management's Discussion and Analysis of Financial Conditions and Results of Operations". If any of the risks described below occur, our business, operating results, and financial condition could be adversely affected and the value of our common stock could decline.

Risks Related to our Financial Position and Capital Requirements

The statements in this section, as well as statements described elsewhere in this annual report, or in other SEC filings, describe risks that could materially and adversely affect our business, financial condition and results of operations, which could also cause the trading price of our equity securities to decline. These risks are not the only risks that we face. Our business, financial condition and results of operations could also be affected by additional factors that are not presently known to us or that we currently consider to be immaterial to our operations

We have incurred losses since inception, we expect to incur significant net losses in the foreseeable future and we may never become profitable.

We have almost always had negative cash flows from operations and have incurred net operating losses each year since we started business. For the years ended December 31, 2017 and 2016, we incurred net loss of $22.7 million and $22.0 million, respectively, our net cash used in operating activities was $18.1 million and $19.5 million, respectively, and, at December 31, 2017, our accumulated deficit was $401.7 million. We expect to continue to incur net losses and negative cash flow from operating activities for at least the next year. As our focus on development of Cytori Cell Therapy, Cytori Nanomedicine, and the development of therapeutic applications has increased, losses have resulted primarily from expenses associated with research and development and clinical trial-related activities, as well as general and administrative expenses. While we have implemented and continue to implement cost reduction measures where possible, we nonetheless expect to continue operating in a loss position on a consolidated basis and expect that recurring operating expenses will be at even higher levels for at least the next year to perform clinical trial and other development activities for our Cytori Cell Therapy and Cytori Nanomedicine products and product candidates, including additional pre-clinical research, clinical trial-related activities, pre-commercialization activities (including regulatory and reimbursement analysis and market research), and marketing.

Our ability to generate sufficient revenues from any of our products, product candidates or technologies to achieve profitability will depend on a number of factors including, but not limited to:

- our ability to manufacture, test and validate our product candidates in compliance with applicable laws and as required for submission to applicable regulatory bodies, including manufacturing, testing and validation of our ATI-0918 drug candidate;
- our or our partners' ability to successfully complete clinical trials of our product candidates;
- our ability to obtain necessary regulatory approvals for our product candidates;
- our or our partners' ability to negotiate and receive favorable reimbursement for our product candidates, including for our product candidates that have been granted or may be granted orphan drug status or otherwise command currently anticipated pricing levels;
- our ability to negotiate favorable arrangements with third parties to help finance the development of, and market and distribute, our products and product candidates; and
- the degree to which our approved products are accepted in the marketplace.

Because of the numerous risks and uncertainties associated with our commercialization and product development efforts, we are unable to predict the extent of our future losses or when or if we will become profitable and it is possible we will never become profitable. If we do not generate significant sales from any of our product candidates that may receive regulatory approval, there would likely be a material adverse effect on our business, results of operations, financial condition and prospects which could result in our inability to continue operations.

We will need substantial additional funding to develop our products and for our future operations. If we are unable to obtain the funds necessary to do so, we may be required to delay, scale back or eliminate our product development activities or may be unable to continue our business.

We have had, and we will continue to have, an ongoing need to raise additional cash from outside sources to continue funding our operations to profitability, including our continuing substantial research and development expenses. We do not currently believe that our cash balance and the revenues from our operations will be sufficient to fund the development and marketing efforts required to reach profitability without raising additional capital from accessible sources of financing in the near future. Although it is difficult to predict future liquidity requirements, we believe that our $9.6 million in cash and cash equivalents on hand as of December 31, 2017 will be sufficient to fund our currently contemplated operations at least through the third quarter of 2018. Our future capital requirements will depend on many factors, including:

- our ability to raise capital to fund our operations on terms acceptable to us, or at all;
- our perceived capital needs with respect to development of our CCT and Cytori Nanomedicine development programs, and any delays in, adverse events of, and excessive costs of such programs beyond what we currently anticipate;

- our ability to establish and maintain collaborative and other arrangements with third parties to assist in bringing our products to market and the cost of such arrangements at the time;
- costs associated with the integration and operation of our newly acquired Cytori Nanomedicine business, including hiring of as many as 20 or more new employees to operate the Cytori Nanomedicine business, and costs of validation, requalification and recommencement of the Cytori Nanomedicine manufacturing operations at our San Antonio, Texas facility;
- the cost of manufacturing our product candidates, including compliance with good manufacturing practices, or GMP, applicable to our product candidates;
- expenses related to the establishment of sales and marketing capabilities for product candidates awaiting approval or products that have been approved;
- the level of our sales and marketing expenses;
- competing technological and market developments; and
- our ability to introduce and sell new products.

We have secured capital historically from grant revenues, collaboration proceeds, and debt and equity offerings. We will need to secure substantial additional capital to fund our future operations. We cannot be certain that additional capital will be available on terms acceptable to us, or at all. Our ability to raise capital was adversely affected when the FDA put a hold on our ATHENA cardiac trials in mid-2014, which had an adverse impact to stock price performance and our corresponding ability to restructure our debt. Subsequently, a continued downward trend in our stock price resulting from a number of factors, including (i) general economic and industry conditions, (ii) challenges faced by the regenerative medicine industry as a whole, (iii) the market's unfavorable view of certain of our recent equity financings conducted in 2014 and 2015 (which financings were priced at a discount to market and included 100% warrant coverage), (iv) market concerns regarding our continued need for capital (and the effects of any future capital raising transactions we may consummate), (v) market perceptions of our ATHENA and ACT-OA clinical trial data, and (vi) our recent Nasdaq listing deficiency issues and resultant 1-for-15 reverse stock split, made it more difficult to procure additional capital on terms reasonably acceptable to us. Most recently, the release in July 2017 of the top-line data from our STAR trial, in which we announced the failure to achieve the trial's primary and secondary endpoints, resulted in a further substantial decrease in our stock price. Though our recent acquisition of the Cytori Nanomedicine business from Azaya Therapeutics, including our ATI-0918 and ATI-1123 drug candidates, appear to have been viewed favorably by our investors and the marketplace, we cannot assure you that this acquisition will not ultimately be viewed negatively and thus further hamper our efforts to attract additional capital. If we are unsuccessful in our efforts to raise any such additional capital, we may be required to take actions that could materially and adversely harm our business, including a possible significant reduction in our research, development and administrative operations (including reduction of our employee base), surrendering of our rights to some technologies or product opportunities, delaying of our clinical trials or regulatory and reimbursement efforts, or curtailing of or even ceasing operations.

Our financing plans include pursuing additional cash through use of offering programs, strategic corporate partnerships, licensing and sales of equity. In November 2017, we completed a public offering in which we distributed to holders of our common stock, at no charge, non-transferable subscription rights to purchase up to 10,000 units, each consisting of one share of our Series B Convertible Preferred Stock and 1,800 warrants to purchase one share of our common stock, at a subscription price of $1,000 per unit, or the 2017 Rights Offering, raising a total of $10 million in gross proceeds. Each share of Series B Convertible Preferred Stock is convertible into approximately 3,000 shares of our common stock, subject to adjustment. We sold a total of 10,000 units as part of the 2017 Rights Offering, under our registration statement on Form S-1, filed on August 14, 2017, as amended.

In addition, in December 2016, we entered into a purchase agreement, or the Lincoln Park Purchase Agreement, with Lincoln Park Capital Fund, LLC, or Lincoln Park, pursuant to which we may direct Lincoln Park to purchase up to $20.0 million in shares of our common stock from time to time over the 30-month period following March 31, 2017, subject to the satisfaction of certain conditions. There is no guarantee that adequate funds will be available when needed from additional debt or equity financing, development and commercialization partnerships or from other sources or on terms acceptable to us. In addition, under current SEC regulations, at any time during which the aggregate market value of our common stock held by non-affiliates, or public float, is less than $75.0 million, the amount we can raise through primary public offerings of securities in any twelve-month period using shelf registration statements, including sales under our ATM offering program, is limited to an aggregate of one-third of our public float. As of December 31, 2017, our public float was 57.6 million shares, the value of which was $17.4 million based upon the closing price of our common stock of $0.3016 on such date. The value of one-third of our public float calculated on the same basis was approximately $5.8 million.

Further, our Loan and Security Agreement with Oxford Finance, LLC, or Oxford, as amended, requires us to maintain a minimum of $1.5 million in unrestricted cash and cash equivalents on hand to avoid an event of default under the Loan and Security Agreement. Based on our cash and cash equivalents on hand of approximately $9.6 million at December 31, 2017, we estimate that we will need to raise additional capital and/or obtain a waiver or restructure the Loan and Security Agreement in the near term to avoid

defaulting under our $1.5 million minimum cash/cash equivalents covenant. If we are unable to avoid an event of default under the Loan and Security Agreement, our business could be severely harmed.

In addition to the funding sources previously mentioned, we continue to seek additional capital through product revenues and state and federal development programs, including additional funding opportunities though our current BARDA contract.

Our level of indebtedness, and covenant restrictions under such indebtedness, could adversely affect our operations and liquidity.

Under our Loan and Security Agreement with Oxford, as collateral agent and lender, Oxford made a term loan to us in an aggregate principal amount of $17,700,000, or the Term Loan, subject to the terms and conditions set forth in the Loan and Security Agreement. The outstanding principal balance of the Term Loan is $13 million as of December 31, 2017.

The Term Loan accrues interest at a floating rate equal to the three-month LIBOR rate (with a floor of 1.00%) plus 7.95% per annum. However, from January 2017 through August 2017, we were required to make payments of principal (in the amount of $590,000 per month) and accrued interest in equal monthly installments of approximately $725,000. On September 20, 2017, we and Oxford amended the Loan and Security Agreement to extend the interest-only period to August 1, 2018 (as we satisfied a requirement to raise unrestricted net cash proceeds of at least $5 million on or before December 29, 2017), beginning September 2018, we will be required to make payments of principal (in the amount of approximately $1.3 million per month) and accrued interest in equal monthly installments of approximately $1.4 million to amortize the Term Loan through June 1, 2019, the maturity date.

As security for our obligations under the Loan and Security Agreement, we granted a security interest in substantially all of our existing and after-acquired assets, subject to certain exceptions set forth in the Loan and Security Agreement. If we are unable to discharge these obligations, Oxford could foreclose on these assets, which would, at a minimum, have a severe material effect on our ability to operate our business.

Our indebtedness to Oxford could adversely affect our operations and liquidity, by, among other things:

- causing us to use a larger portion of our cash flow to fund interest and principal payments, reducing the availability of cash to fund working capital and capital expenditures and other business activities;
- making it more difficult for us to take advantage of significant business opportunities, such as acquisition opportunities, and to react to changes in market or industry conditions; and
- limiting our ability to borrow additional monies in the future to fund working capital and capital expenditures and for other general corporate purposes.

The Loan and Security Agreement, as amended, requires us to maintain at least $1.5 million in unrestricted cash and/or cash equivalents and includes certain reporting and other covenants, that, among other things, restrict our ability to (i) dispose of assets, (ii) change the business we conduct, (iii) make acquisitions, (iv) engage in mergers or consolidations, (v) incur additional indebtedness, (vi) create liens on assets, (vii) maintain any collateral account, (viii) pay dividends, (ix) make investments, loans or advances, (x) engage in certain transactions with affiliates, and (xi) prepay certain other indebtedness or amend other financing arrangements. If we fail to comply with any of these covenants or restrictions, such failure may result in an event of default, which if not cured or waived, could result in Oxford causing the outstanding loan amount ($13 million as of December 31, 2017) to become immediately due and payable. If the maturity of our indebtedness is accelerated, we may not have, or be able to timely procure, sufficient cash resources to satisfy our debt obligations, and such acceleration would adversely affect our business and financial condition.

In addition, our indebtedness under the Loan and Security Agreement is secured by a security interest in substantially all of our existing and after-acquired assets, excluding our intellectual property assets (which are subject to a negative pledge), and therefore, if we are unable to repay such indebtedness, Oxford could foreclose on these assets, which would, at a minimum, have a severe material effect on our ability to operate our business.

The report of our independent registered public accounting firm contains an emphasis paragraph regarding the substantial doubt about our ability to continue as a "going concern."

The audit report of our independent registered public accounting firm covering the December 31, 2017 consolidated financial statements contains an explanatory paragraph that states that our recurring losses from operations, liquidity position, and debt service requirements raises substantial doubt about our ability to continue as a going concern. This going concern opinion could materially limit our ability to raise additional funds through the issuance of new debt or equity securities or otherwise. Future reports on our financial statements may also include an explanatory paragraph with respect to our ability to continue as a going concern. To date, our operating losses have been funded primarily from outside sources of invested capital and gross profits. We have had, and we will likely continue to have, an ongoing need to raise additional cash from outside sources to fund our future operations. However, no

assurance can be given that additional capital will be available when required or on terms acceptable to us. If we are unsuccessful in our efforts to raise any such additional capital, we would be required to take actions that could materially and adversely affect our business, including significant reductions in our research, development and administrative operations (including reduction of our employee base), possible surrender or other disposition of our rights to some technologies or product opportunities, delaying of our clinical trials or curtailing or ceasing operations. We also cannot give assurance that we will achieve sufficient revenues in the future to achieve profitability and cash flow positive operations to allow us to continue as a going concern. The perception that we may not be able to continue as a going concern may cause third parties to choose not to deal with us due to concerns about our ability to meet our contractual obligations, which could have a material adverse effect on our business.

We may not be able to access the full amounts available under the Lincoln Park Purchase Agreement, which could prevent us from accessing the capital we need to continue our operations, which could have an adverse effect on our business.

In December 2016, we entered into the Lincoln Park Purchase Agreement, pursuant to which we may direct Lincoln Park to purchase up to $20.0 million of shares of our common stock from time to time over the 30-month period following March 31, 2017, subject to the satisfaction of certain conditions. Thereafter, on any trading day selected by us, we may sell shares of common stock to Lincoln Park in amounts up to 100,000 shares per regular sale (such purchases, Regular Purchases) up to the aggregate commitment of $20.0 million. If the market price of our common stock is not below $2.00 per share on the purchase date, then the Regular Purchase amount may be increased to 150,000 shares. If the market price is not below $3.00 per share on the purchase date, then the Regular Purchase amount may be increased to 300,000 shares. Although there are no upper limits on the per share price Lincoln Park may pay to purchase our common stock, we may not sell more than $1.0 million in shares of common stock to Lincoln Park per any individual Regular Purchase. The purchase price of Regular Purchases will be based on the prevailing market prices of shares of our common stock, which shall be equal to the lesser of the lowest sale price of the common shares during the purchase date and the average of the three lowest closing sale prices of the common shares during the ten business days prior to the purchase date.

In addition to Regular Purchases, we may in our sole discretion direct Lincoln Park on each purchase date to make accelerated purchases on the following business day up to the lesser of (i) three times the number of shares purchased pursuant to such Regular Purchase or (ii) 30% of the trading volume on the accelerated purchase date at a purchase price equal to the lesser of (i) the closing sale price on the accelerated purchase date and (ii) 97% of the accelerated purchase date's volume weighted average price (such purchases, Accelerated Purchases). We cannot submit an Accelerated Purchase notice if the market price of our common stock is below $1.00.

In addition to Regular Purchases and Accelerated Purchases described above, we may also direct Lincoln Park, on any business day that the closing price of our common stock is not below $1.00, to purchase additional amounts of our common stock, which we refer to as an Additional Purchase whereby, pursuant to each Additional Purchase we may sell up to $1.0 million of common stock in each Additional Purchase notice, provided, however, that (i) we may not deliver to Lincoln Park more than two separate Additional Purchase notices and (ii) at least 30 business days must pass between our delivery of the first Additional Purchase notice to Lincoln Park and our delivery of the second Additional Purchase notice. The purchase price for each such Additional Purchase shall be equal to the lower of (i) 97% of the purchase price under a Regular Purchase on the date we give notice for the related Additional Purchase, or (ii) $2.00 per share.

Depending on the prevailing market price of our common stock, we may not be able to sell shares to Lincoln Park for the maximum $20.0 million over the term of the Lincoln Park Purchase Agreement. For example, under the rules of the Nasdaq Capital Market, in no event may we issue more than 19.99% of our shares outstanding (which is approximately 4,315,814 shares based on 21,579,071 shares outstanding prior to the signing of the Lincoln Park Purchase Agreement) under the Lincoln Park Purchase Agreement unless we obtain stockholder approval or an exception pursuant to the rules of the Nasdaq Capital Market is obtained to issue more than 19.99%. This limitation will not apply if, at any time the exchange cap is reached and at all times thereafter, the average price paid for all shares issued and sold under the Lincoln Park Purchase Agreement is equal to or greater than $1.6674, which was the consolidated closing bid price of our common stock on December 22, 2016 including an increment for the commitment shares we issued and may issue to Lincoln Park. We are not required or permitted to issue any shares of common stock under the Purchase Agreement if such issuance would breach our obligations under the rules or regulations of the Nasdaq Capital Market. In addition, Lincoln Park will not be required to purchase any shares of our common stock if such sale would result in Lincoln Park's beneficial ownership exceeding 9.99% of the then outstanding shares of our common stock. Our inability to access a portion or the full amount available under the Lincoln Park Purchase Agreement, in the absence of any other financing sources, could have a material adverse effect on our business.

The sale or issuance of our common stock to Lincoln Park may cause dilution and the sale of the shares of common stock acquired by Lincoln Park, or the perception that such sales may occur, could cause the price of our common stock to fall.

In December 2016, we entered into the Lincoln Park Purchase Agreement, pursuant to which Lincoln Park has committed to purchase up to $20.0 million of our common stock. Concurrently with the execution of the Lincoln Park Purchase Agreement, we issued 127,419 shares of our common stock to Lincoln Park as an initial fee for its commitment to purchase shares of our common stock under the Lincoln Park Purchase Agreement. Further, for each additional purchase by Lincoln Park, we will issue additional commitment shares in commensurate amounts up to a total of 382,258 shares based upon the relative proportion of the aggregate amount of $20.0 million purchased by Lincoln Park. The purchase shares that may be sold pursuant to the Lincoln Park Purchase Agreement may be sold by us to Lincoln Park at our discretion from time to time over the 30-month period following March 31, 2017, subject to the satisfaction of certain conditions. The purchase price for the shares that we may sell to Lincoln Park under the Lincoln Park Purchase Agreement will fluctuate based on the price of our common stock. Depending on market liquidity at the time, sales of such shares may cause the trading price of our common stock to fall.

We generally have the right to control the timing and amount of any sales of our shares to Lincoln Park. Additional sales of our common stock, if any, to Lincoln Park will depend upon market conditions and other factors to be determined by us. Lincoln Park may ultimately purchase all, some or none of the shares of our common stock that may be sold pursuant to the Lincoln Park Purchase Agreement and, after it has acquired shares, Lincoln Park may sell all, some or none of those shares. Therefore, sales to Lincoln Park by us could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

Material weaknesses in our internal control over financial reporting have occurred in the past and could occur in the future.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting, as well as a statement that our independent registered public accounting firm has issued an attestation report on the effectiveness of our internal control over financial reporting.

We identified a material weakness in our internal control over financial reporting for the year ended December 31, 2013, which may have adversely affected investor confidence in us and, as a result, the value of our common stock. While no such material weakness was identified for the years ended December 31, 2017 or December 31, 2016, we cannot assure you that additional material weaknesses will not be identified in the future.

If we are unable to effectively remediate any material weaknesses in a timely manner, or if we identify one or more additional material weaknesses in the future, investors could lose confidence in the accuracy and completeness of our financial reports, which could have a material adverse effect on the price of our common stock.

We may not be able to correctly estimate or control our future operating expenses, which could lead to cash shortfalls.

Our budgeted expense levels are based in part on our expectations concerning future revenues from sales as well our assessment of the future investments needed to expand our commercial organization and support research and development activities. We may be unable to reduce our expenditures in a timely manner to compensate for any unexpected events or a shortfall in revenue. Accordingly, a shortfall in demand for our products or other unexpected events could have an immediate and material impact on our business and financial condition.

Our operating results have been and will likely continue to be volatile.

Our prospects must be evaluated in light of the risks and difficulties frequently encountered by emerging companies and particularly by such companies in rapidly evolving and technologically advanced biotech, pharmaceutical and medical device fields. From time to time, we have tried to update our investors' expectations as to our operating results by periodically announcing financial guidance. However, we have in the past been forced to revise or withdraw such guidance due to lack of visibility and predictability of product demand.

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

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change, by value, in its equity ownership over a three year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change taxable income and taxes may be limited. We may have experienced, or may in the future experience, "ownership changes" as a result of shifts in stock ownership. Any such ownership changes could limit our ability to use net operating loss carryforwards and other pre-change tax

attributes. Furthermore, under recently enacted U.S. tax legislation, although the treatment of tax losses generated before December 31, 2017 has generally not changed, tax losses generated in calendar year 2018 and beyond may be used to offset only 80% of taxable income. This change may require us to pay federal income taxes in future years despite generating a loss for federal income tax purposes in prior years.

Recent U.S. tax legislation may materially adversely affect our financial condition, results of operations and cash flows.

Recently enacted U.S. tax legislation has significantly changed the U.S. federal income taxation of U.S. corporations, including by reducing the U.S. corporate income tax rate, and revising the rules governing net operating losses and foreign tax credits. Many of these changes are effective immediately, without any transition periods or grandfathering for existing transactions. The legislation is unclear in many respects and could be subject to potential amendments and technical corrections, as well as interpretations and implementing regulations by the Treasury and Internal Revenue Service, or IRS, any of which could lessen or increase certain adverse impacts of the legislation. In addition, it is unclear how these U.S. federal income tax changes will affect state and local taxation, which often uses federal taxable income as a starting point for computing state and local tax liabilities. While our analysis and interpretation of this legislation is ongoing, based on our current evaluation, we have reflected a $45.8 million write-down of our federal deferred income tax assets (including the value of our net operating loss carryforwards and our tax credit carryforwards) due to the reduction of the U.S. corporate income tax rate. This amount may be subject to further adjustment in subsequent periods throughout 2018 in accordance with subsequent interpretive guidance issued by the SEC or the IRS. Further, there may be material adverse effects resulting from the legislation that we have not yet identified. While some of the changes made by the tax legislation may adversely affect the Company in one or more reporting periods and prospectively, other changes may be beneficial on a going forward basis. We continue to work with our tax advisors and auditors to determine the full impact on us of the recent tax legislation. We urge our investors to consult with their legal and tax advisors with respect to such legislation.

Risks Related to Our Business and Industry

Our success depends in large part upon the successful development and commercialization of our cellular therapeutics, especially Habeo Cell Therapy for hand impairment in patients with scleroderma. The U.S. STAR clinical trial assessed the safety and efficacy of Habeo Cell Therapy and failed to achieve its primary and secondary endpoints. We completed the analysis of the data from the trial, and recently provided a pre-submission meeting briefing document focused on PMA content and format review for Celution System and scleroderma to the FDA required in advance of an in-person meeting with the FDA scheduled for later in March 2018, whereas depending on the outcome of such meeting, we may be unable to identify a viable path forward for continued development of this product candidate, which in turn could materially and adversely affect our business and operations.

Our success in large part is dependent upon our ability to develop our CCT products, and in particular, our lead product candidate, Habeo Cell Therapy, or Habeo. In July 2017, we announced top-line results from our U.S. STAR clinical trial that evaluated the safety and efficacy of Habeo for hand impairment in patients with scleroderma. In this trial, Habeo did not achieve its primary endpoint of improvement in hand dysfunction, compared to placebo, as measured by the Cochin Hand Function Score, or CHFS, at twenty-four (24) and forty-eight (48) weeks, nor did it achieve its secondary endpoints of improvement in the Raynaud's Condition Score and the Scleroderma Health Assessment Questionnaire at forty-eight (48) weeks, compared to placebo.

Analysis of the STAR data indicated that within a pre-specified subgroup analysis, Habeo-treated patients within the diffuse cutaneous scleroderma subset indicated improvements in the CHFS and the Health Assessment Questionnaire-Disability Index (a measure of functional disability), that met or exceeded the published criteria for minimally important clinical differences in these measures as compared to STAR patients with diffuse cutaneous scleroderma within the placebo group. However, these differences may not be deemed sufficient to continue development of Habeo. Thorough analysis of our STAR data may result in the determination that there is not a viable plan for continued development of Habeo. Further, anticipated discussions with the FDA and with other regulatory authorities regarding our STAR data and Habeo may be unsuccessful or may result in imposition of onerous requirements should we pursue further development of this therapy. Even if we desire to design further trials and continue to pursue a path toward potential regulatory approval of Habeo, any such development will likely require significant financial and personnel resources. We may be unable to obtain sufficient capital to fund such further trials, and any such trials, if funded, may fail to yield positive results. Further, the failure to achieve our primary or secondary endpoints in the STAR trial will likely have an adverse effect on our current commercial sales of our cellular therapeutics, on the development and implementation of our EMEA managed access program, our and our partners' efforts to develop, commercialize and sell our cellular therapeutics, and on our efforts to find additional partners to develop and commercialize our cellular therapeutic product candidates.

There can be no assurance that we will be able to further develop Habeo. Our continuing analyses of data from the STAR trial may produce negative or inconclusive results, or may be inconsistent with our previously announced data results. Because our cell therapy business is in substantial part dependent on the success of Habeo, if we are unable to identify, fund and ultimately execute an alternative development strategy for this product candidate or our other cell therapy candidates, we may be required to reduce or curtail our cell therapy activities, which would materially and adversely affect our business and operations, and could require us to liquidate, dissolve or otherwise wind down our operations. Further, if we decide to sell or otherwise dispose of our cell therapy platform, we may be unable to identify a suitable acquirer, or may be unable to negotiate and consummate a transaction on terms acceptable to us.

Our future success is in large part dependent upon our ability to successfully integrate and develop our Cytori Nanomedicine platform and commercialize our newly acquired ATI-0918 drug candidate, and any failure to do so could significantly harm our business and prospects.

In February 2017, we acquired substantially all of the assets of Azaya Therapeutics Inc, or Azaya, including Azaya's two drug candidates, ATI-0918 and ATI-1123, and related manufacturing equipment and inventory. Our ability to successfully integrate, develop and commercialize these assets is subject to a number of risks, including the following:

- Azaya suspended its business, including its research and development efforts, at the end of 2015, so we must recommence the business, including (i) recalibration, revalidation and requalification of the acquired drug manufacturing equipment and manufacturing facility located in San Antonio, Texas; and (ii) hiring of substantial numbers of new employees to operate the Cytori Nanomedicine business. We may encounter unexpected issues and expenses in recommencing this business;
- We do not have substantive drug development, manufacturing, and commercialization experience, and thus we may be required to hire and rely on significant numbers of scientific, quality, regulatory and other technical personnel with the experience and expertise necessary to develop, manufacture, and commercialize our Cytori Nanomedicine drug candidates. We may be unable to identify, hire and retain personnel with the requisite experience to conduct the operations necessary to obtain regulatory approval and commercialize our ATI-0918 and ATI-1123 product candidates, in which case our business would be materially harmed;
- ATI-0918, a complex generic pegylated liposomal formulation of doxorubicin, is very difficult to manufacture, and we can offer no assurances that we will (i) be able to manufacture this drug in accordance with all applicable laws and regulations; or (ii) demonstrate bioequivalence to Lipodox® (Sun Pharma) in the United States; or Caelyx® (Janssen, a Johnson & Johnson company) in Europe as required to obtain regulatory approvals within our currently anticipated timeframes, or at all;
- We intend to find a commercialization partner to share or assume responsibility for marketing, sales, and distribution activities and related costs and expenses for our ATI-0918 and ATI-1123 drug candidates. We do not currently have the financial resources to perform an ATI-0918 bioequivalence study against Lipodox required to submit an ANDA to

FDA or develop our ATI-1123 drug candidate internally, nor do we currently have the financial or human resources to market, sell, and distribute ATI-0918 or ATI-1123 if and when approved by regulatory agencies, so if we are unable to find a suitable partner to share in these activities and costs, we may be forced to delay or suspend our development and commercialization activities, or procure additional capital to continue development of these drug candidates ourselves. There can be no assurance that we would obtain sufficient capital to fund the development, manufacturing, and commercialization of our Cytori Nanomedicine program ourselves, or if we do obtain such capital, that our development, manufacturing, and commercialization efforts would be successful;

- Conduct of this newly acquired business will require significant capital, and to the extent that we incur unanticipated expenses or revenue downturns in our business, are unable to timely obtain sufficient additional capital on terms acceptable to us (or at all) to fund this business, our ability to commercialize our ATI-0918 drug candidate could be materially and adversely impacted;
- New competitive products become commercially available before we launch ATI-0918;
- It is possible that the EMA could change the reference drug for ATI-0918 in Europe from Caelyx. Though we deem this possibility to be unlikely, if the EMA were to change the reference drug, we could be required to conduct a bioequivalence trial to establish bioequivalence with the new reference drug, which would adversely affect our business and operations; and
- We are not experienced in acquiring and integrating new businesses.

If we are unable to successfully partner with other companies to commercialize our product candidates, our business could materially suffer.

A key part of our business strategy is to leverage strategic partnerships/collaborations to commercialize our product candidates. We do not have the financial, human or other resources necessary to develop, commercialize, launch or sell our therapeutic offerings in all of the geographies that we are targeting, and thus it is important that we identify and partner with third parties who possess the necessary resources to bring our products to market. We expect that any such partners will provide regulatory and reimbursement/pricing expertise, sales and marketing resources, and other expertise and resources vital to the success of our product offerings in their territories. We further expect, but cannot guarantee, that any such partnering arrangements will include upfront cash payments to us in return for the rights to develop, manufacture, and/or sell our products in specified territories, as well as downstream revenues in the form of milestone payments and royalties.

We are currently prioritizing our efforts to find a strategic partner for Habeo, among other assets. For various reasons, including the data from our STAR clinical trial and the novelty of our cellular therapeutic approach, the regulatory and reimbursement environments for Habeo in certain markets, including Europe and the Asia-Pacific region, are complex and uncertain. There can be no assurance that regulatory agencies or authorities in the U.S., Europe, the Asia-Pacific region or elsewhere will grant conditional or full regulatory approval for Habeo on the timeframes we anticipate, or at all, nor can we guarantee that government or commercial payers will grant us favorable reimbursement for use of Habeo. In fact, we anticipate that our STAR data will result in delays in our regulatory approval efforts for Habeo, or cause us to abandon or materially alter our regulatory approval strategies for Habeo. Further, even if we receive regulatory approval and favorable reimbursement, there is no guarantee that a market will develop for Habeo at our intended price points, or at all. These commercialization risks could affect prospective partners' or collaborators' willingness to enter into partnering arrangements on terms acceptable to us, or at all. Prospective partners may be unwilling to enter into Habeo collaboration/partnering agreements with us in light of our STAR clinical trial data. We anticipate that it will be difficult to find a commercialization partner for Habeo on favorable terms, if at all. Further, if data from the recently enrolled French investigator-initiated and Cytori-supported SCLERADEC-II trial are not positive, or if the trial is discontinued prior to receipt of data, the regulatory and commercial hurdles for Habeo will further increase, especially in the EU.

We are also prioritizing our efforts to find a strategic partner to help commercialize and sell our ATI-0918 drug candidate, initially in Europe, the U.S., and China, and secondarily, to fund development and commercialization of our ATI-1123 product candidate. We do not currently have the commercial resources to market and sell either ATI-0918 or ATI-1123. There can be no assurance that we will enter into partnering agreements for either ATI-0918 or ATI-1123 with suitable partners on terms acceptable to us, or at all. At present, we do not intend to expend significant resources on development of ATI-1123. However, regardless of whether we enter into a partnering agreement for ATI-0918, we may still incur significant costs and expenses related to manufacturing, testing validation, and regulatory and clinical work necessary to support a generic drug application submission to EMA. If we cannot find a suitable partner for our ATI-0918 product candidate, our business could be significantly harmed.

We may also solicit partnering interest in our ECCO-50 Cell Therapy for use in knee osteoarthritis, but we anticipate that our partnering efforts with respect to this indication will be subordinate to our Habeo Cell Therapy and ATI-0918 partnering efforts. Further, while consistent trends were observed in most secondary endpoints relative to the placebo group in our ACT-OA knee osteoarthritis trial, the 12-week endpoint of single pain on walking question did not achieve statistical significance, so there can be no assurance that our partnering efforts for our ECCO-50 therapeutics will be successful.

In addition, we may seek development and/or commercial partners for the other therapeutic indications set forth in our clinical pipeline, including use of ECCI-50 Cell Therapy in stress urinary incontinence, or SUI, in men following surgical removal of the prostate gland (this therapeutic indication is currently the subject of an investigator-initiated trial in Japan, called ADRESU).

There can be no assurance that this male SUI pipeline indication will be attractive to prospective partners. The male SUI market is small (approximately $45.0 million) in Japan. We anticipate that the failure to achieve the primary and secondary endpoints in our STAR trial could materially hamper our efforts to identify prospective cell therapy partners or to negotiate cell therapy partnering transactions on terms favorable to us, or at all.

Even if we succeed in securing partners for our lead or other product candidates, our partners may fail to develop or effectively commercialize our product candidates. Partnerships and collaborations involving our products and product candidates pose a number of risks, including the following:

- partners may not have sufficient resources or may decide not to devote the necessary resources due to internal constraints such as budget limitations, lack of human resources, or a change in strategic focus;
- partners may believe our intellectual property is not valid or is unenforceable or unprotectable, or the product or product candidate infringes on the intellectual property rights of others;
- partners may dispute their responsibility to conduct development and commercialization activities pursuant to the applicable collaboration, including the payment of related costs or the division of any revenues;
- partners may decide to pursue a competitive product developed outside of the partnering arrangement;
- partners may not be able to obtain, or believe they cannot obtain, the necessary regulatory approvals or reimbursement rates for the product candidates; and
- partners may decide to terminate or not to renew their agreement with us for these reasons or other reasons.

As a result, partnering agreements may not lead to development or commercialization of our lead product candidates or other product candidates in the most efficient manner or at all.

Our current business strategy is high-risk.

Our current business strategy is to aggressively develop and commercialize our Cytori Cell Therapy and Cytori Nanomedicine platforms, while simultaneously controlling expenses and preserving and growing our existing contract and commercial product revenues. We also believe that there are synergies between our existing cellular therapeutic technologies and our oncology drug assets that we can exploit and commercialize in the long-term with significant investment.

Our current business strategy is a high-risk strategy for a number of reasons including the following:

- current and anticipated clinical trials using Cytori Cell Therapy, including our current STAR clinical trial, the investigator-initiated and Cytori-supported SCLERADEC II trial, and investigator-initiated ADRESU trial, may not yield positive results;
- research and development and commercialization of our cellular therapeutics and our oncology drug assets will require significant amounts of additional capital, and we cannot assure you that we will have access to sufficient capital, or find partners to provide capital, necessary to develop and bring our products to market;
- our business model may be challenging for prospective business partners, as our therapeutic approach involves:
    - multiple procedures - liposuction followed by preparation and same-day administration of the autologous cellular therapeutic – for which there may not be existing reimbursement codes (or which reimbursement codes and payment levels may not be deemed adequate by prospective partners); and
    - processing of cells via our Celution System (which to date has been regulated as a medical device by the FDA, BSI, and MHLW), followed by administration of our Cytori Cell Therapy, which is considered to be an ATMP by EMA and other regulatory agencies.
- our current installed base of Celution devices may pose potential risks to us if the operators of these devices (i) harm a patient during the course of treating the patient with Cytori Cell therapy; or (ii) treat patients “off label” in a manner that is competitive with us, creates channel conflict with us, or otherwise negatively impacts our business;
- our Celution platform is a novel technology that may never receive marketing authorization for our intended therapeutic indications;

- we may incur material costs and expenses in executing our business strategy that are not currently contemplated and that could cause our operating expenses to materially increase beyond current projections;
- our Celution technology is potentially subject to different regulatory regimes in different territories, and we are not experienced in obtaining regulatory approvals for therapeutic indications, such as hand impairment in scleroderma patients, of our Cytori Cell Therapy products;
- we do not have an operating history as a drug company, or prior experience with obtaining regulatory, reimbursement or other approvals for product candidates such as ATI-0918 and ATI-1123;
- our ATI-0918 and ATI-1123 drug candidates, if commercialized, will compete against established competitive drugs that are marketed and sold by large companies with significant human, technical and financial resources;
- we are not experienced in acquiring and integrating new assets, such as those acquired from Azaya;
- an intense and rapidly evolving competitive landscape for our Cytori Nanomedicine product candidates, and as such key assumptions regarding market entry, pricing, and revenue/unit share may not be realized;
- our product candidates may never become commercially viable;
- we may not be able to prevent other companies from depriving us of market share and profit margins by selling products based on our intellectual property and developments; and
- the regenerative medicine industry is very risky and this has adversely affect our ability to attract investment capital and collaborators for our Cytori Cell Therapy.

Our business is sensitive to general economic, business and industry conditions.

We are exposed to general economic, business and industry conditions, both in the United States and globally. Adverse global economic and financial conditions are difficult to predict and mitigate against, and therefore the potential impact is difficult to estimate. Negative trends in the economy, including trends resulting from an actual or perceived recession, tightening credit markets, such as significant reductions in available capital and liquidity from banks and other credit providers, substantial volatility in equity and currency values worldwide, prolonged recessionary or slow growth periods, increased cost of commodities, including oil, actual or threatened military action by the United States, and threats of terrorist attacks in the United States and abroad, could cause a reduction of investment in and available funding for companies in certain industries, including ours and those of our customers. Thus, our business operations and ability to raise capital has been, and may in the future, be adversely affected by downturns in current credit conditions, financial markets and the global economy.

We face intense competition, and if our competitors market and/or develop products that are marketed more effectively, approved more quickly than our product candidates or demonstrated to be safer or more effective than our products, our commercial opportunities could be reduced or eliminated.

The life science industry is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary therapeutics. We face competition from a number of sources, some of which may target the same indications as our products or product candidates, including small and large, domestic and multinational, medical device, biotechnology and pharmaceutical companies, academic institutions, government agencies and private and public research institutions, many of which have greater financial resources, sales and marketing capabilities, including larger, well-established sales forces, manufacturing capabilities, experience in obtaining regulatory approvals for product candidates and other resources than we do.

We expect that product candidates in our pipeline, if approved, to compete on the basis of, among other things, product efficacy and safety, time to market, price, coverage and reimbursement by third-party payers, extent of adverse side effects and convenience of treatment procedures. One or more of our competitors may develop other products that compete with ours, obtain necessary approvals for such products from the FDA, EMA, MHLW or other agencies, if required, more rapidly than we do or develop alternative products or therapies that are safer, more effective and/or more cost effective than any products developed by us. The competition that we encounter with respect to any of our product candidates that receive the requisite regulatory approval and classification and are marketed may have an effect on our product prices, market share and results of operations. We may not be able to differentiate any products that we are able to market from those of our competitors, successfully develop or introduce new products that are less costly or offer better results than those of our competitors, or offer purchasers of our products payment and other commercial terms as favorable as those offered by our competitors. In addition, competitors may seek to develop alternative formulations of or technological approaches to our product candidates and/or alternative cell therapy or drug delivery technologies that address our targeted indications.

Cytori Cell Therapy: Cytori Cell Therapy may face competition from cell therapies derived from autologous or allogeneic tissue sources such as adipose tissue, bone marrow and cord blood, and processed using alternative approaches, methods and

technologies such as cryopreserved, cultured, expanded, manual, non-enzymatic, selectively isolated cell therapies, and other therapeutic approaches including those administered using oral, subcutaneous, topical and intravenous routes. If approved for the treatment of hand dysfunction in scleroderma patients, Habeo Cell Therapy will likely compete against other products and product candidates. GlaxoSmithKline is sponsoring a U.S. Phase 2 multi-center clinical trial to evaluate GSK2330811 in patients with systemic sclerosis. Corbus Pharmaceuticals is conducting the international multicenter Phase 3 RESOLVE-1 study, a double-blind, randomized, placebo-controlled study assessing the efficacy and safety of lenabasum for the treatment of systemic sclerosis. The study will enroll approximately 354 subjects at 70 sites in North America, Europe, Israel, Japan, South Korea, and Australia. The planned duration of treatment with study drug is 52 weeks. Subjects will be randomized 1:1:1 to receive lenabasum 5 mg twice per day, lenabasum 20 mg twice per day, or placebo twice per day. The primary efficacy outcome of the RESOLVE-1 will be change from baseline in modified Rodnan Skin Score, a measure of skin fibrosis and a standard clinical trial outcome in systemic sclerosis University of Pittsburgh, in collaboration with the National Institute of Arthritis and Musculoskeletal and Skin Diseases, is conducting a Phase II clinical trial evaluating Lipitor's (atorvastatin) effect on blood vessel function and Raynaud symptoms in patients with early diffuse systemic sclerosis. The University of Michigan, in collaboration with Pfizer, is performing a Phase 1/2 clinical study to evaluate tofacitinb treatment in subjects with diffuse cutaneous systemic scleroderma. Bayer is a collaborator in a Phase 2 clinical trial evaluating Adempas (riociguat) in patients with scleroderma-associated digital ulcers. Bristol-Myers Squibb and National Institute of Allergy and Infectious Diseases are collaborators in a Phase 2 clinical trial evaluating Abatacept in patients with diffuse cutaneous systemic sclerosis. Invtiva Pharma is sponsoring a Phase 2 clinical trial evaluating IVA337 in patients with diffuse cutaneous systemic sclerosis. Seoul St. Mary's Hospital is involved in clinical trials evaluating autologous stromal vascular fraction injected into the fingers of patients with systemic sclerosis. Sanofi is sponsoring a Phase 2 clinical trial evaluating SAR156597 in patients with diffuse systemic sclerosis. Hoffman-La Roche is sponsoring Phase 3 clinical trials evaluating Actemra (tocilizumab) in patients with systemic sclerosis. UMC Utrecht is conducting the Phase 1/2 MANUS trial which aims to examine the safety, feasibility and potential efficacy of intramuscularly injected allogeneic mesenchymal stromal cells as treatment of digital ulcers of systemic sclerosis. Many of these studies use the primary and secondary outcome measures as used in our STAR clinical trial.

Our Cytori Cell Therapy may also face competition from lower priced, alternative therapies, including manually processed, or "home brewed" ADRCs or fat grafts that are harvested and used to treat patients for a wide range of indications. There are hundreds of stromal vascular fraction clinics within the United States alone that purport to offer cell therapy treatments for ailments ranging from facial rejuvenation to stroke. Though the FDA has indicated that it intends to regulate this "home brew" industry, if it fails to do so, then companies without FDA approvals may continue to offer cell therapy treatments on an "off-label," unapproved basis at substantially lower prices then we intend to command. Similar clinics exist in every other market in which we currently or intend to compete.

Cytori Nanomedicine: We may face competition for our ATI-0918 asset (which is intended for the treatment of breast and ovarian cancers, multiple myeloma, and Kaposi's sarcoma) from multiple drug classes including antiretrovirals, chemotherapies, corticosteroids, histone deacetaylase inhibitors, hormone therapies, immunotherapies, and targeted therapies, as well as companies seeking approvals in Europe or the United States for their pegylated liposomal doxorubicin products. In particular, if a competitor is first to the European market with an EMA-approved generic pegylated liposomal doxorubicin that is bioequivalent to Caelyx, our projections and market assumptions for our ATI-0918 would have to be materially altered and our business could be harmed. Taiwan Liposome Company has reported that they filed a Marketing Authorization Application, or MAA, with the EMA in the first half of 2017 for its generic TLC177 product, which is ahead of our schedule for submitting our MAA for ATI-0918. Further, Dr. Reddy's, Sun Pharma, and Teva are performing bioequivalence studies against Caelyx, data from which they may use to support EMA MAAs as well. In the United States, we may face competition for ATI-0918 from multiple generic formulations of pegylated liposomal doxorubicin. Sun Pharma's Lipodox and Dr. Reddy's DOXOrubicin HCl Liposome products are currently approved in the United States and Actavis has reported that it has filed an ANDA with the FDA. Further, Watson, Tolmar, Panacea Biotec, Emcure, Cadila, Cipla, and Aurobindo are performing bioequivalence studies against Lipodox, data from which they may to use to support FDA ANDAs.

Companies that currently have or have had development programs for nanoparticle-docetaxel products and may be future competitors for our ATI-1123 asset include:

- Intas / Accord and INSYS / NeoPharm which previously completed clinical studies of liposomal docetaxel for breast cancer, metastatic pancreatic cancer, metastatic prostate cancer, and solid tumors.
- Adocia's DriveIn nanoparticle-docetaxel product candidate, which is in the preclinical stage;
- Cristal Therapeutics' CriPac nanoparticle-docetaxel, which is currently being evaluated in a Phase 1a/1b clinical trial for the treatment of solid tumors and which was recently awarded with a Horizon 2020 grant to advance through Phase 2 trials; and

- Oasmia's Docecal, a formulation of docetaxel combined with a patented nanoparticle-based technology, XR17, which is currently being evaluated in a Phase 1 clinical trial.
- NanOlogy is evaluating NanoDoce, a sterile nanoparticle docetaxel, in preclinical studies
- Jazz Pharma acquired Celator Pharmaceuticals' preclinical stage product candidate, CPX-8, a hydrophobic docetaxel prodrug nanoparticle formulation being studied by the NCI's Nanotechnology Characterization Laboratory
- Merrimack Pharmaceuticals' MM-310, a liposomal formulation of docetaxel, is being evaluated in a Phase 1 open-label study in patients with solid tumors.

Competitors may have greater experience in developing drugs or devices, conducting clinical trials, obtaining regulatory clearances or approvals, manufacturing and commercialization. It is possible that competitors may obtain patent protection, approval, or clearance from the FDA or achieve commercialization earlier than we can, any of which could have a substantial negative effect on our business. Compared to us, many of our potential competitors have substantially greater:

- capital resources;
- research and development resources and experience, including personnel and experience;
- product development, clinical trial and regulatory resources and experience;
- sales and marketing resources and experience;
- manufacturing and distribution resources and experience;
- name, brand and product recognition; and
- resources, experience and expertise in prosecution and enforcement of intellectual property rights.

As a result of these factors, our competitors may obtain regulatory approval of their products more quickly than we are able to or may obtain patent protection or other intellectual property rights that limit or block us from developing or commercializing our product candidates. Our competitors may also develop products that are more effective, more useful, better tolerated, subject to fewer or less severe side effects, more widely prescribed or accepted or less costly than ours and may also be more successful than we are in manufacturing and marketing their products. If we are unable to compete effectively with the marketed therapeutics of our competitors or if such competitors are successful in developing products that compete with any of our product candidates that are approved, our business, results of operations, financial condition and prospects may be materially adversely affected.

***Our clinical trials may fail to demonstrate acceptable levels of safety and efficacy for Habeo Cell Therapy or any of our other product candidates, which could prevent or significantly delay their regulatory approval and commercialization,* which would have a material and adverse impact on our business.**

Clinical testing of our products is a long, expensive and uncertain process, and the failure or delay of a clinical trial can occur at any stage. Many factors, currently known and unknown, can adversely affect clinical trials and the ability to evaluate a product candidate's efficacy. During the course of treatment, patients can die or suffer other adverse events for reasons that may or may not be related to the proposed product being tested. Even if initial results of preclinical and nonclinical studies or clinical trial results are promising, we may obtain different results in subsequent trials or studies that fail to show the desired levels of safety and efficacy, or we may not obtain applicable regulatory approval for a variety of other reasons. For instance, the investigator-initiated 12-patient, open-label SCLERADEC I trial investigating use of Habeo Cell Therapy for hand complications of scleroderma, sponsored by the Assistance Publique Hôpitaux de Marseille, or AP-HM, located in Marseille, France, has reported strong clinical data suggesting safety and efficacy of a single treatment of Habeo Cell Therapyout to three years after treatment. However, the six and 12 month results of the STAR trial failed to demonstrate statistical significance of the primary and secondary endpoints. Therefore, there can be no assurances that AP-HM's current SCLERADEC II clinical trial will be successful. This trial is testing broader human use of Habeo Cell Therapy in blinded, randomized, placebo-controlled trial settings, as opposed to SCLERADEC I's open-label, single arm, uncontrolled, unblinded format. In addition, we recently released a more detailed assessment of STAR Trial data at the World Scleroderma Congress this past February, and in late 2017, submitted a request for a a pre-submission meeting with FDA, which shall happen later this quarter, and shall provide us with a clearer picture of the optimal path forward with Habeo Cell therapy in the U.S. Many companies in our industry have suffered significant setbacks in advanced clinical trials, despite promising results in earlier trials. If the results of our FDA pre-submission meeting are not favorable, or if our Cytori-supported SCLERADEC II clinical trial do not meet their primary endpoints, we will likely be unable to obtain regulatory approval for our Habeo Cell Therapy, and may be forced to abandon our scleroderma development program, which would severely affect our business.

Further, with respect to the conduct and results of clinical trials generally, in the United States, Europe, Japan and other jurisdictions, the conduct and results of clinical trials can be delayed, limited suspended, or otherwise adversely affected for many reasons, including, among others:

- clinical results may not meet prescribed endpoints for the studies or otherwise provide sufficient data to support the efficacy of our product candidates;
- clinical and nonclinical test results may reveal side effects, adverse events or unexpected safety issues associated with the use of our product candidates;
- lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional trials and studies and increased expenses associated with the services of our contract research organizations, or CROs, and other third parties;
- inability to design appropriate clinical trial protocols;
- slower than expected rates of subject recruitment and enrollment rates in clinical trials;
- regulatory review may not find a product safe or effective enough to merit either continued testing or final approval;
- regulatory review may not find that the data from preclinical testing and clinical trials justifies approval;
- regulatory authorities may require that we change our studies or conduct additional studies which may significantly delay or make continued pursuit of approval commercially unattractive;
- a regulatory agency may reject our trial data or disagree with our interpretations of either clinical trial data or applicable regulations;
- the cost of clinical trials required for product approval may be greater than what we originally anticipate, and we may decide to not pursue regulatory approval for such a product;
- a regulatory agency may identify problems or other deficiencies in our existing manufacturing processes or facilities or the existing processes or facilities of our collaborators, our contract manufacturers or our raw material suppliers;
- a regulatory agency may change its formal or informal approval requirements and policies, act contrary to previous guidance, adopt new regulations or raise new issues or concerns late in the approval process;
- a product candidate may be approved only for indications that are narrow or under conditions that place the product at a competitive disadvantage, which may limit the sales and marketing activities for such products or otherwise adversely impact the commercial potential of a product; and
- a regulatory agency may ask us to put a clinical study on hold pending additional safety data; (and there can be no assurance that we will be able to satisfy the regulator agencies' requests in a timely manner, which can lead to significant uncertainty in the completion of a clinical study).

In addition, Cytori Cell Therapy is currently the subject of a number of investigator-initiated trials, including the SCLERADEC II clinical trial in France and the ADRESU clinical trial in Japan. While these investigator-initiated trials are useful to help enhance awareness and use of our cell therapy technologies and products, and to identify potential therapeutic targets, there are also associated risks. We do not control the design and conduct of these trials, thus any data integrity issues or patient safety arising out of any of these trials would be beyond our control, yet could adversely affect our reputation and damage the clinical and commercial prospects for our Cytori Cell Therapy product candidates.

We also face clinical trial-related risks with regard to our reliance on other third parties in the performance of many of the clinical trial functions, including CROs, that help execute our clinical trials, the hospitals and clinics at which our trials are conducted, the clinical investigators at the trial sites, and other third-party service providers. Failure of any third-party service provider to adhere to applicable trial protocols, laws and regulations in the conduct of one of our clinical trials could adversely affect the conduct and results of such trial (including possible data integrity issues), which could seriously harm our business.

Our success depends in substantial part on our ability to obtain regulatory approvals for Habeo Cell Therapy and ATI-1123. However, we cannot be certain that we will receive regulatory approval for these product candidates or our other product candidates.

We have only a limited number of product candidates in development, and our business depends substantially on their successful development and commercialization. Our product candidates will require development, regulatory review and approval in multiple jurisdictions, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing

efforts before we can generate any revenues from sales of our product candidates. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug products are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, whose regulations differ from country to country.

We are not permitted to market our product candidates in the United States until we receive approval from the FDA, or in any foreign countries until we receive the requisite approval from the regulatory authorities of such countries (including centralized marketing authorization from the European Medicines Agency), and we may never receive such regulatory approvals. Obtaining regulatory approval for a product candidate is a lengthy, expensive and uncertain process, and may not be obtained. Any failure to obtain regulatory approval of any of our product candidates would limit our ability to generate future revenues (and any failure to obtain such approval for all of the indications and labeling claims we deem desirable could reduce our potential revenue), would potentially harm the development prospects of our product candidates and would have a material and adverse impact on our business.

Even if we successfully obtain regulatory approvals to market our product candidates, our revenues will be dependent, in part, on our ability to commercialize such products as well as the size of the markets in the territories for which we gain regulatory approval. If the markets for our product candidates are not as significant as we estimate, our business and prospects will be harmed

Regarding to our two current lead commercialization candidates, Habeo Cell Therapy and ATI-0918:

- Though we believe that Habeo Cell Therapy will be regulated as an Advanced Therapeutic Medicinal Product, or ATMP, in Europe, it is possible that the EMA instead provides a medical device classification for Habeo Cell Therapy, in which case we will be unable to avail ourselves of the orphan drug designation granted to us covering use of Cytori Cell Therapy for systemic sclerosis, and will instead compete with other medical device manufacturers purporting to offer cellular therapeutics competitive with ours (and possibly at much lower price points than we currently contemplate for our therapy). Any classification of Cytori Cell Therapy as a medical device could make it difficult for us to identify pharmaceuticals companies willing to help us commercialize this product offering in Europe, and could also deter medical device companies from partnering with us given potential pricing and competitive concerns.
- If Habeo Cell Therapy is classified as an ATMP in Europe, then we may be required to comply with applicable cGMP requirements, as interpreted and implemented at the national level in each country, which would take longer and cost more to get to market than if Habeo Cell Therapy were classified as a medical device, and would in turn increase the costs of commercializing Habeo Cell Therapy in these countries. Further, potential pharmaceutical partners may be wary of the medical device component of our cell therapy. These commercialization hurdles could increase the difficulties in finding suitable partners to help us commercialize this product offering in Europe.
- The EMA has approved nine ATMPs in Europe to date, of which only five are still on the market with three being withdrawn and one suspended, with application review periods ranging from approximately thirteen to thirty-five months. This wide range in review periods makes it difficult to predict whether and on what timeframe our Habeo Cell Therapy would receive EMA approval, if at all.
- Given the novelty of our cellular therapeutics technology, we anticipate that we may face regulatory hurdles in other jurisdictions outside of the United States and Europe that could delay regulatory approval and commercial launch of Habeo Cell Therapy.
- The reference drugs for ATI-0918, which are currently Lipodox® in the United States and Caelyx® in Europe, may change and we could be required to conduct a bioequivalence trial to establish bioequivalence with the new reference drugs, which would adversely affect our business and operations.
- Though Azaya previously completed a European ATI-0918 60-patient bioequivalence trial, the EMA has not confirmed the adequacy of the trial for purposes of determining bioequivalence of ATI-0918 to Caelyx®. It is possible that the EMA could require us to conduct another bioequivalency trial for ATI-0918, which would cause us to incur significant delays and additional costs and expense and would materially and adversely affect our business.
- Though it is our intent to expeditiously pursue regulatory review of ATI-0918 in Europe through submission of a marketing authorization application, or MAA, to the EMA, prior to submission of this application we must first conduct and complete certain activities, including chemistry, manufacturing and controls, or CMC, activities, for inclusion in the application, and we cannot guarantee that we will successfully complete these activities.
- We may decide to seek scientific advice from the EMA regarding required elements of the MAA before we submit the MAA, and if the EMA's scientific advice requires us to conduct substantive additional work (including possible provision of substantial additional data or information), our submission of the MAA could be materially delayed, which in turn would materially push back our anticipated launch date for ATI-0918 in Europe.

- If we are unable to satisfy the EMA's requirements to issuance of the marketing authorization for ATI-0918, we will not be able to launch ATI-0918 in Europe, and our business would be materially harmed.

If a product candidate is not approved in a timely fashion on commercially viable terms, or if development of any product candidate is terminated due to difficulties or delays encountered in the regulatory approval process, it could have a material adverse effect on our business, and we may become more dependent on the development of other proprietary products and/or our ability to successfully acquire other products and technologies. There can be no assurance that any product candidate will receive regulatory approval in a timely manner, or at all.

If our products candidate and technologies receive regulatory approval but do not achieve broad market acceptance, especially by physicians, the revenues that we generate will be limited.

The commercial success of any of our approved products or technologies will depend upon the acceptance of these products and technologies by physicians, patients and the medical community. The degree of market acceptance of these products and technologies will depend on a number of factors, including, among others:

- acceptance by physicians and patients of the product as a safe and effective treatment;
- any negative publicity or political action related to our or our competitors' products or technologies;
- the relative convenience and ease of administration;
- the prevalence and severity of adverse side effects;
- demonstration to authorities of the pharmacoeconomic benefits;
- demonstration to authorities of the improvement in burden of illness;
- limitations or warnings contained in a product's approved labeling;
- payers' level of restrictions and/or barriers to coverage;
- the clinical indications for which a product is approved;
- availability and perceived advantages of alternative treatments;
- the effectiveness of our or any current or future collaborators' sales, marketing and distribution strategies; and
- pricing and cost effectiveness.

Our Celution technology and products compete against cell-based therapies derived from alternate sources, such as bone marrow, umbilical cord blood and, potentially, embryos. Some of our competitors with products based on these other cell-based therapies have substantially greater financial, human and technical resources than we do. In addition, some of them have approved products with therapeutic claims, established revenues and broad market recognition. Physicians historically are slow to adopt new technologies like ours regardless of the perceived merits when older technologies, as the current standard of care, continue to be supported by established providers. Overcoming such inertia often requires significant marketing expenditures or definitive product performance and/or pricing superiority.

We face similar competitive pressures with our Cytori Nanomedicine product candidates. As a generic pegylated liposomal encapsulation of doxorubicin, ATI-0918, if approved and launched commercially, will potentially compete against Caelyx in Europe and Doxil, Lipodox®, and DOXOrubicin HCl Liposome in the United States. These existing competitive liposomal doxorubicin products have been on the market for many years, have gained widespread physician acceptance and are marketed by competitors with substantially greater resources than we have. Further, our ATI-1123 product candidate, if developed and commercialized, would compete against a number of established docetaxel drugs, including Taxotere® (Sanofi S.A.) and numerous existing generic docetaxel products, as well as other potential liposomal docetaxel products being developed and commercialized by competitors.

We expect physicians' inertia and skepticism to also be a significant barrier as we attempt to gain market penetration with our future products. We believe we will continue to need to finance lengthy time-consuming clinical studies to provide evidence of the medical benefit of our products and resulting therapies in order to overcome this inertia and skepticism.

Overall, our efforts to educate the medical community on the benefits of any of our products or technologies for which we obtain marketing approval from the FDA or other regulatory authorities and gain broad market acceptance may require significant resources and may never be successful. If our products and technologies do not achieve an adequate level of acceptance by physicians, pharmacists and patients, we may not generate sufficient revenue from these products to become or remain profitable.

Many potential applications of our product candidates are pre-commercial, which subjects us to development and marketing risks.

Our products candidates are at various stages of development. Successful development and market acceptance of our products is subject to developmental risks, including risk of negative clinical data from current and anticipated trials, failure of inventive imagination, ineffectiveness, lack of safety, unreliability, manufacturing hurdles, failure to receive necessary regulatory clearances or approvals, high commercial cost, preclusion or obsolescence resulting from third parties' proprietary rights or superior or equivalent products, competition from copycat products and general economic conditions affecting purchasing patterns. There can be no assurance that we or our partners will successfully develop and commercialize our product candidates, or that our competitors will not develop competing technologies that are less expensive or superior. Failure to successfully develop and market our product candidates would have a substantial negative effect on our results of operations and financial condition.

Regarding our cell therapy products, we believe that our long-term viability and growth will depend in large part on our ability to establish the safety and efficacy of our cell therapies through clinical trials and studies. Though we generate revenues from commercial sales of our Celution products, there is no proven path for commercializing Cytori Cell Therapy in a way to earn a durable profit commensurate with the medical benefit. We have been engaged for a number of years in commercial sales of our Celution devices and consumable kits in Japan, Europe, and certain Asia Pacific markets, and our cell banking products in Japan, but we have not achieved significant growth due in significant part to our inability thus far to obtain therapeutic, on-label use that is reimbursed by payers. Thus, we do not expect the market for our products to appreciably increase until we have positive clinical data from a validated, Phase III, controlled, randomized trial that reports safety and efficacy of our cellular therapeutic in a discrete disease state or condition. However, there can be no assurance that one or more clinical trials of our cell therapy product candidates will yield positive results.

Regarding our Cytori Nanomedicine program, our ATI-0918 generic drug candidate is pre-commercial. Our ATI-0918 bioequivalence trial results and accompanying manufacturing and other data are subject to review and feedback by the EMA prior to our submission of our marketing authorization application, or MAA, to the EMA. There can be no assurances that the EMA will view the results of the bioequivalence trial favorably. Further, we are required to complete certain manufacturing, drug stability and other activities before we submit our MAA to the EMA. There can be no assurance that the EMA will deem our MAA sufficient grant us marketing authorization within the timelines we currently project, or at all.

Our ATI-1123 drug candidate is in early clinical stages and is subject to all of the attendant risks of an early-stage drug. Should we wish to commercialize ATI-0918 in the United States, we believe we will need to conduct a clinical trial to demonstrate bioequivalence to the then-current reference drug in the United States (currently Lipodox®). Any such bioequivalency trial would be time and resource intensive and could ultimately fail to demonstrate ATI-0918's bioequivalence to the reference drug. Also, we intend to find a partner to develop our ATI-1123 drug candidate, but and if we are unsuccessful in doing so, our ATI-1123 development program could be delayed or suspended.

If we or any party to a key collaboration, licensing, development, acquisition or similar arrangement fails to perform material obligations under such arrangement, or any arrangement is terminated for any reason, there could be an adverse effect on our business.

We are currently party to certain licensing, collaboration and acquisition agreements under which we may make or receive future payments in the form of milestone payments, maintenance fees, royalties and/or minimum product purchases. We are dependent on our collaborators to commercialize Cytori Cell Therapy in certain countries and in certain indications for us to realize any financial benefits from these collaborations. Our collaborators may not devote the attention and resources to such efforts to be successful. In addition, in the event that a party fails to perform under a key collaboration agreement, or if a key collaboration agreement is terminated, the reduction in anticipated revenues could delay or suspend our commercialization efforts in certain countries. Specifically, the termination of a key collaboration agreement by one of our collaborators could materially impact our ability to enter into additional collaboration agreements with new collaborators on favorable terms.

Risks relating to our current material collaborations (excluding our BARDA partnership, which is discussed below in these "Risk Factors") include the following:

- Under our asset purchase agreement with Azaya, we are required to use commercial reasonable efforts to develop our ATI-0918 and ATI-1123 drug candidates, and we have future milestone, earn-out and other payments to Azaya tied to our commercialization and sale activities for these drug candidates. If we are unsuccessful in our efforts to develop our ATI-0918 and ATI-1223 drug assets, or if Azaya and we were to enter into a dispute over the terms of our agreement, then our business could be seriously harmed.
- Lorem Vascular, is our exclusive licensee for our Cytori Cell Therapy products in all fields of use in China, Hong Kong, Singapore, Malaysia and Australia under the terms of the Lorem Agreement. Lorem Vascular is responsible for

commercializing our Cytori Cell Therapy products in these territories. Lorem Vascular is relatively new company with limited operating history, and has yet to generate meaningful revenues in its licensed territories. There can be no assurance that Lorem Vascular will be able to generate meaningful revenues in its licensed territories in the future. We are in ongoing discussions with Lorem Vascular regarding the terms of our collaboration, including the structure of the Lorem Agreement. If we are unable to agree with Lorem Vascular on revised terms to our collaboration, our relationship with them could suffer. A dispute may arise between us and Lorem Vascular that could lead to arbitration or other adversarial proceedings. Any such proceedings could cause significant diversion of management time and attention, cause us significant expense, and could potentially result in an outcome adverse to us. Further, any such dispute could negatively affect our ability to realize any sales or royalty revenues from Lorem Vascular's commercial activities in the territories under its exclusive license. Even if we successfully restructure or otherwise revise our agreement with Lorem Vascular, there can be no assurance that Lorem Vascular will be able to successfully commercialize our Celution products in China or in the other territories subject to its license. Further, if Lorem Vascular fails to comply with any regulations applicable to its development, marketing and sale of our products, there can be no assurance that regulators would not try to hold us responsible for such activities.

- Pursuant to the Bimini Agreement, we have, among other things, granted Bimini an exclusive, worldwide license to use and sell our Cytori Cell Therapy products in the alopecia (hair loss) field. Cytori and Bimini granted certain licenses to each other, and have certain license, royalty and other payment obligations under the Bimini agreement, as well as certain supply, development and non-competition obligations. If we and Bimini were to enter into a dispute regarding the terms of our agreement, our business could be harmed.

If we or our distributors or collaborators fail to comply with regulatory requirements applicable to the development, manufacturing, and marketing of our products, regulatory agencies may take action against us or them, which could significantly harm our business.

Our products and product candidates, along with the clinical development process, the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for these products, are subject to continual requirements and review by the FDA and state and foreign regulatory bodies. Regulatory authorities subject a marketed product, its manufacturer and the manufacturing facilities to continual review and periodic inspections. We, our distributors and collaborators, and our and their respective contractors, suppliers and vendors, will be subject to ongoing regulatory requirements, including complying with regulations and laws regarding advertising, promotion and sales of products, required submissions of safety and other post-market information and reports, registration requirements, Clinical Good Manufacturing Practices (cGMP) regulations (including requirements relating to quality control and quality assurance, as well as the corresponding maintenance of records and documentation), and the requirements regarding the distribution of samples to physicians and recordkeeping requirements. Regulatory agencies may change existing requirements or adopt new requirements or policies. We, our distributors and collaborators, and our and their respective contractors, suppliers and vendors, may be slow to adapt or may not be able to adapt to these changes or new requirements.

Failure to comply with regulatory requirements may result in any of the following:

- restrictions on our products or manufacturing processes;
- warning letters;
- withdrawal of the products from the market;
- voluntary or mandatory recall;
- fines;
- suspension or withdrawal of regulatory approvals;
- suspension or termination of any of our ongoing clinical trials;
- refusal to permit the import or export of our products;
- refusal to approve pending applications or supplements to approved applications that we submit;
- product seizure;
- injunctions; or
- imposition of civil or criminal penalties.

To the extent any of our customers fail to use our products in compliance with applicable regulations, regulators could try to hold us responsible if they believe we facilitated or were otherwise somehow responsible for our customer's non-compliance.

We currently sell our Celution-based Cell Therapy products in numerous markets outside of the United States for research and commercial use. These markets have different, and in some cases, less burdensome, regulatory schemes applicable to our products than in the United States. To the extent any of our customers, whether inside or outside the United States, use or further market our products in their home market or in other markets in a way that does not comply with applicable local regulations, regulators could try to hold us responsible if they believe we facilitated or were otherwise responsible for the customer's actions. While we take measures in an effort to protect us against these types of risks, we cannot ensure you that such measures would prevent us from becoming subject to any such claims.

We and our products are subject to extensive regulation, and the requirements to obtain regulatory approvals in the United States and other jurisdictions can be costly, time-consuming and unpredictable. If we or our partners are unable to obtain timely regulatory approval for our product candidates, our business may be substantially harmed.

Cytori Cell Therapy: Our Celution system family of products and components of the Stemsource cell banks, must receive regulatory clearances or approvals from the FDA and from foreign regulatory bodies prior to commercial sale in those jurisdictions. Our Cytori Cell Therapy platform, including the Celution device, Celase and Intravase reagents, and consumable kits, is subject to stringent government regulation in the United States by the FDA under the Federal Food, Drug and Cosmetic Act, and by the EMA and other regulatory agencies outside of the United States under their respective regulatory regimes.

The regulatory process for our cell therapy products can be lengthy, expensive, and uncertain. Before any new medical device may be introduced to the U.S. market, the manufacturer generally must obtain FDA clearance or approval through either the 510(k) pre-market notification process or the lengthier pre-market approval, or PMA, process. It generally takes from three to 12 months from submission to obtain 510(k) pre-market clearance, although it may take longer. Approval of a PMA could take four or more years from the time the process is initiated. The 510(k) and PMA processes can be expensive, uncertain, and lengthy, and there can be no assurance of ultimate clearance or approval. Our Celution products under development today and in the foreseeable future will be subject to the lengthier PMA process. Securing FDA clearances and approvals may require the submission of extensive clinical data and supporting information to the FDA. Failure to comply with applicable requirements can result in application integrity proceedings, fines, recalls or seizures of products, injunctions, civil penalties, total or partial suspensions of production, withdrawals of existing product approvals or clearances, refusals to approve or clear new applications or notifications, and criminal prosecution.

For us to market our products in Europe, Canada, Japan and certain other non-U.S. jurisdictions, we need to obtain and maintain required regulatory approvals or clearances and must comply with extensive regulations regarding safety, manufacturing processes and quality. These regulations, including the requirements for approvals or clearances to market, may differ from the FDA regulatory scheme. International sales also may be limited or disrupted by political instability, price controls, trade restrictions and changes in tariffs. Additionally, fluctuations in currency exchange rates may adversely affect demand for our products by increasing the price of our products in the currency of the countries in which the products are sold.

Medical devices are also subject to post-market reporting requirements for deaths or serious injuries when the device may have caused or contributed to the death or serious injury, as well as for certain device malfunctions that would be likely to cause or contribute to a death or serious injury if the malfunction were to recur. If safety or effectiveness problems occur after the product reaches the market, the FDA may take steps to prevent or limit further marketing of the product. Additionally, the FDA actively enforces regulations prohibiting marketing and promotion of devices for indications or uses that have not been cleared or approved by the FDA. While we believe that our current activities are in compliance with FDA regulations relating to marketing and promotion, if regulators were to determine that our commercialization efforts, or those of our distributors, collaborators or customers, involve improper marketing and promotion of our products in violation of FDA regulations, our business could be substantially negatively affected.

There can be no assurance that we will be able to obtain the necessary 510(k) clearances or PMA approvals to market and manufacture our other products in the United States for their intended use on a timely basis, if at all. Delays in receipt of or failure to receive such clearances or approvals, the loss of previously received clearances or approvals or failure to comply with existing or future regulatory requirements could have a substantial negative effect on our results of operations and financial condition. In addition, there can be no assurance that we will obtain regulatory approvals or clearances in all of the other countries where we intend to market our products, or that we will not incur significant costs in obtaining or maintaining foreign regulatory approvals or clearances, or that we will be able to successfully commercialize current or future products in various foreign markets. Delays in receipt of approvals or clearances to market our products in foreign countries, failure to receive such approvals or clearances or the future loss of previously received approvals or clearances could have a substantial negative effect on our results of operations and financial condition.

Cytori Nanomedicine: The worldwide regulatory process for our Cytori Nanomedicine drug candidates can be lengthy and expensive, with no guarantee of approval.

Before any new drugs may be introduced to the U.S. market, the manufacturer generally must obtain FDA approval through either an abbreviated new drug application, or ANDA, process for generic drugs off patent that allow for bioequivalence to an existing reference listed drug, or RLD, or the lengthier new drug approval, or NDA, process, which typically requires multiple successful and

successive clinical trials to generate clinical data supportive of safety and efficacy along with extensive pharmacodynamic and pharmacokinetic preclinical testing to demonstrate safety. Our lead drug product under development (ATI-0918) is eligible ANDA process, while our ATI-1123 drug candidate is subject to the significantly lengthier NDA process. Approval of an ANDA could take four or more years from the time the process is initiated due to the requirement for clinical trials. NDA drugs could take significantly longer due to the additional preclinical requirements along with the typical requirement for two successful Phase III clinical studies.

In Europe, as in the United States, there are two regulatory steps to complete before a drug candidate is approved to be marketed in the European Union. These two steps are clinical trial application and marketing authorization application. Clinical trial applications are approved at the member state level, whereas marketing authorization applications are approved at both the member state and centralized levels. Both ATI-0918 and ATI-1123 may follow the centralized procedure for EMA regulatory approval. The centralized procedure allows the applicant to obtain a marketing authorization that is valid throughout the EU. Similar to the FDA process, the EMA centralized process requires bioequivalence data for generic drug candidates such as ATI-0918, and robust clinical data for non-generic drug candidates like ATI-1123 similar to clinical data required for NDA drug candidates.

There are numerous risks arising out of the regulation of our ATI-0918 and ATI-1123 drug candidates include the following:

- We can provide no assurances that our current and future oncology drugs will meet all of the stringent government regulation in the United States, by the FDA under the Federal Food, Drug and Cosmetic Act, and/or in international markets such as Europe, by the EMA under its Medicinal Products Directive.
- We intend to seek regulatory of our ATI-0918 drug candidate via abbreviated approval processes referred to as bioequivalence or BE, approved under an abbreviated new drug application, or ANDA. There are no assurances that these abbreviated processes are or will be available in markets outside of the United States, or where available, that we will successfully obtain regulatory approvals via such abbreviated processes.
- It is required for ANDA and BE drug candidates that there is a RLD, with which the drug candidate must demonstrate equivalence. There are no assurances that the reference drug for ATI-0918 will be the same in all territories or countries, which could require different and unique BE clinical studies for some territories where we currently intend to commercialize ATI-0918. Changes in the RLD may result in the nullification of BE clinical studies and can result in significant delays in the regulatory process as BE clinical studies may need to be repeated for jurisdictions that no longer recognize the reference drug utilized in BE clinical studies.
- Our Cytori Nanomedicine drug candidates, if approved, will still be subject to post-market reporting requirements for deaths or serious injuries when the drug may have caused or contributed to the death or serious injury, or serious adverse events. There are no assurances that our drug products will not have safety or effectiveness problems occurring after the drugs reach the market. There are no assurances that regulatory authorities will not take steps to prevent or limit further marketing of the drug due to safety concerns.
- It is possible that the new legislation in our priority markets, such as the newly enacted CURES Act in the United States, will yield additional regulatory requirements for therapeutic drugs for our Cytori Nanomedicine drug candidates (the FDA's interpretation and implementation of the CURES Act has yet to be published).

Changing, new and/or emerging government regulations may adversely affect us.

Cytori Cell Therapy: Government regulations can change without notice. Given the fact that we operate in various international markets, our access to such markets could change with little to no warning due to a change in government regulations that suddenly up-regulate our product(s) and create greater regulatory burden for our cell therapy and cell banking technology products.

Our ability to receive regulatory approvals for our Cytori Cell Therapy products and to sell into foreign markets is complex, due in part to by the nature of our Celution platform and manufacturing process. The platform consists of our Celution device that processes the patient's own adipose (fat) tissue to create a heterogeneous mixture of regenerative cells. In the United States, this heterogeneous mixture of cells is subject to classification as a drug, but the FDA has made the determination that our Cytori Cell Therapy will be regulated as a Class III PMA medical device. However, foreign regulatory bodies must assess our particular platform and manufacturing process to make their own determination whether our Cytori Cell Therapy product candidates should receive medical device or drug classifications. For example, the European Commission has granted orphan drug designation for the use of Cytori Cell Therapy (currently branded as Habeo Cell Therapy) in treatment of system sclerosis. The EMA has not made a determination whether it would classify Habeo Cell Therapy as an ATMP or a medical device. Though we believe that Habeo Cell Therapy will be classified by the EMA as an ATMP, we cannot guarantee that the EMA will not arrive at a different determination at such time that we ask a determination to be made. Regardless of the EMA's ultimate determination, we will also be required to comply with the particular regulatory requirements of each of the member states of the European Economic Area (comprised of 28 European Union, or EU, member states plus Iceland, Liechtenstein, and Norway) with respect to our cell therapy offerings, a process which we anticipate will require considerable time, effort and expense. We expect that regulatory bodies in other jurisdictions will engage in similar analyses of our Cytori Cell Therapy, and we cannot predict then outcomes of these analyses.

In Japan, the Japanese Diet passed the Act regarding Ensuring of Safety of Regenerative Medicine, or the Regenerative Medicine Law, and the revisions to the Pharmaceutical Affairs Law as applied to drugs, medical devices and regenerative medicine. The Regenerative Medicine Law initially caused some confusion for regenerative companies operating in Japan, but we believe that this law, as currently implemented, benefits Cytori and its customers by allowing an expedited path for our customers in Japan to obtain licenses under the Regenerative Medicine Law to treat patients with Cytori Cell Therapy. However, we cannot be certain that the Regenerative Medicine Law will not be repealed or that current interpretations and implementation of the Regenerative Medicine Law will not change in a manner adverse to our business. Further, we currently import and sell our products in Japan under Class I notifications that we obtained several years ago. However, at the request of Japanese regulators, we are in the process of obtaining Class III approvals for our Celution device and consumable kits. Though we are pursuing these Class III approvals process without any anticipated interruption to our commercial activities, it is possible that other jurisdictions in which we currently sell may require similar heightened regulatory approvals but with potential restrictions on our ability to market and sell our Cytori Cell Therapy products in such territories during the application process and review period for the required regulatory approvals.

Any regulatory review committees and advisory groups and any contemplated new guidelines may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. As we advance our product candidates, we may be required to consult with these regulatory and advisory groups, and comply with applicable guidelines. If we fail to do so, we may be required to delay or discontinue development of our product candidates. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a product candidate to market could decrease our ability to generate sufficient revenue to maintain our business. Divergence in regulatory criteria for different regulatory agencies around the globe could result in the repeat of clinical studies and/or preclinical studies to satisfy local territory requirements, resulting in the repeating of studies and/or delays in the regulatory process. Some territories may require clinical data in their indigenous population, resulting in the repeat of clinical studies in whole or in part. Some territories may object to the formulation ingredients in the final finished product and may require reformulation to modify or remove objectionable components; resulting in delays in regulatory approvals. Such objectionable reformulations include, but are not limited to, human or animal components, BSE/TSE risks, banned packaging components, prohibited chemicals, banned substances, etc. There can be no assurances that FDA or foreign regulatory authorities will accept our pre-clinical and/or clinical data.

Due to the fact that there are new and emerging cell therapy and cell banking regulations that have recently been drafted and/or implemented in various countries around the world, the application and subsequent implementation of these new and emerging regulations have little to no precedence. Therefore, the level of complexity and stringency is not known and may vary from country to country, creating greater uncertainty for the international regulatory process.

Anticipated or unanticipated changes in the way or manner in which the FDA or other regulators regulate products or classes/groups of products can delay, further burden, or alleviate regulatory pathways that were once available to other products. There are no guarantees that such changes in the FDA's or other regulators' approach to the regulatory process will not deleteriously affect some or all of our products or product applications.

Cytori Nanomedicine: Our nanoparticle technology is also subject to government regulations that are subject to change. Our lead drug product, ATI-0918 is regulated under bioequivalence rules that rely on a reference listed drug, or RLD, for equivalence in the United States and other jurisdictions. Government agencies can change the reference listed drug or reference drug without notice. These changes in the RLD could invalidate clinical studies and require the initiation of new clinical studies for determining equivalence to a newly assigned RLD. Furthermore, bioequivalence studies may need to be repeated in certain foreign entities as some governments may require additional confirmatory studies in their patient populations. These additional requirements could result in additional clinical studies or delays in the regulatory process. Other risks with the RLD criteria are in the criteria for demonstrating bioequivalence. Bioequivalence criteria may not be identical in all geographical regions, resulting in the requirement for new bioequivalence studies to demonstrate equivalence to a more stringent standard. Additionally, bioequivalence criteria rely on the products being "off patent" in the territory. Patent expiration dates may vary in different regions which may result in bioequivalence regulatory pathways being delayed in some territories. Current regulatory pathways such as the abbreviated new drug application, or ANDA, pathway, of we are currently relying on, are subject to change and may cease to be viable regulatory pathways in the future.

Our pipeline oncology products, such as ATI-1123, are being developed under existing government criteria, which are subject to change in the future. Clinical and/or pre-clinical criteria in addition to cGMP manufacturing requirements may change and impose additional regulatory burdens. Clinical requirements are subject to change which may result in delays in completing the regulatory process. Divergence in regulatory criteria for different regulatory agencies around the globe could result in the repeat of clinical studies and/or preclinical studies to satisfy local jurisdictional requirements, which would significantly lengthen the regulatory process and increase uncertainty of outcome. Some jurisdictions may require clinical data in their indigenous population, resulting in the repeat of clinical studies in whole or in part. Some jurisdictions may object to the formulation ingredients in the final finished product and may require reformulation to modify or remove objectionable components; resulting in delays in regulatory approvals. Such objectionable reformulations include, but are not limited to, human or animal components, bovine spongiform encephalopathy/

transmissible spongiform encephalopathy risks, banned packaging components, prohibited chemicals, banned substances, etc. There can be no assurance that the FDA or foreign regulatory authorities will accept our pre-clinical and/or clinical data.

We may have difficulty obtaining appropriate and sufficient pricing and reimbursement for our cell therapy products.

New and emerging cell therapy and cell banking technologies, such as those provided by the Cytori Cell Therapy family of products, may have difficulty or encounter significant delays in obtaining health care reimbursement in some or all countries around the world due to the novelty of our cell therapy and cell banking technology and subsequent lack of existing reimbursement schemes/pathways. Therefore, the creation of new reimbursement pathways may be complex and lengthy with no assurances that such reimbursements will be successful. The lack of health insurance reimbursement or reduced or minimal reimbursement pricing may have a significant impact on our ability to successfully sell our cell therapy and cell banking technology products into a county or region at pricing that is profitable and that adequately compensates Cytori for its development costs, which would negatively impact our operating results.

Our European managed access program for Habeo Cell Therapy may not be successful, which in turn could adversely affect our Habeo Cell Therapy commercialization efforts.

Our managed access program, or MAP (also known as early access program or named patient program), is intended to provide access in select countries across Europe, the Middle East and Africa, and Latin America to our Habeo Cell Therapy for patients with impaired hand function due to scleroderma in advance of anticipated commercialization of Habeo Cell Therapy. Our MAP has faced and may continue to face numerous challenges, including the following:

- In most countries, patient access to Habeo Cell therapy will be provided on an ‘individual’ patient basis where physicians will make an application to their competent authority in each country on a patient-by-patient basis. This imposes a significant administrative burden on participating physicians, and requires them to navigate a process with which they are oftentimes unfamiliar.
- In certain countries, hospitals and/or patients will be required to pay a portion of our procedure fees under our MAP. This payment obligation may limit the number of hospitals and patients who can afford to participate in our MAP.
- Because Cytori is targeting an orphan indication in scleroderma where there is an established need for effective therapies, regulators in Europe have been willing to allow an approval trial based on limited data from the 12-patient, investigator initiated SCLERADEC I pilot trial. The lack of robust Phase 2/3 clinical data has also proven to be a hurdle to MAP acceptance. We believe that positive results from future clinical trials will help drive interest in our MAP, but there is no guarantee that these trials will achieve positive results.

Orphan drug designation may not ensure that we will enjoy market exclusivity in a particular market, and if we fail to obtain or maintain orphan drug designation or other regulatory exclusivity for some of our product candidates, our competitive position would be harmed.

A product candidate that receives orphan drug designation can benefit from potential commercial benefits following approval. Under the U.S. Orphan Drug Act, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition, defined as affecting a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the European Union, or EU, the EMA’s Committee for Orphan Medicinal Products, or COMP, grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than 10,000 persons in the EU. Currently, this designation provides market exclusivity in the U.S. and the European Union for seven years and ten years, respectively, if a product is the first such product approved for such orphan indication. This market exclusivity does not, however, pertain to indications other than those for which the drug was specifically designated in the approval, nor does it prevent other types of drugs from receiving orphan designations or approvals in these same indications. Further, even after an orphan drug is approved, the FDA can subsequently approve a drug with similar chemical structure for the same condition if the FDA concludes that the new drug is clinically superior to the orphan product or a market shortage occurs. In the EU, orphan exclusivity may be reduced to six years if the drug no longer satisfies the original designation criteria or can be lost altogether if the marketing authorization holder consents to a second orphan drug application or cannot supply enough drug, or when a second applicant demonstrates its drug is “clinically superior” to the original orphan drug.

In April 2016, the European Commission, acting on the positive recommendation from the COMP, issued orphan drug designation to a broad range of Cytori Cell Therapy formulations when used for the treatment of systemic sclerosis. In November 2016, the U.S. FDA Office of Orphan Products Development granted us an orphan drug designation for cryopreserved or centrally processed ECCS-50 (Habeo) for scleroderma. Either or both of such orphan drug designations may fail to result in or maintain orphan drug exclusivity upon approval, which would harm our competitive position.

We generate 71% of our sales revenues from Japan, with 83% of those revenues generated by sales to four customers. This concentration of sales in one territory, and to one small group of customers in Japan, makes us vulnerable to the loss of our key customers and to adverse changes in the Japanese market.

In 2017, we generated approximately $1.9 million in sales revenues in Japan, representing 71% of our overall global sales revenues. 83% of the Japan sales revenues were from four key customers. We expect a relatively small number of customers to account for a majority of our revenues for the foreseeable future. This concentration of sales in one country, and in a small subset of customers within such country, represents a risk to our business. Our existing business in Japan, and our prospects for further growth of product sales in Japan, are subject to a number of risks, including the following:

- Existing laws and regulations pertaining to our business, including the Act regarding Ensuring of Safety of Regenerative Medicine, or the Regenerative Medicine Law, passed in 2013, may be repealed, or implemented, amended or superseded, in a manner that is adverse to our business;
- Macroeconomic conditions in Japan may deteriorate, thus weakening demand for our cell therapy products, which are used in self-pay procedures in Japan;
- Japanese regulatory authorities may take unexpected actions with respect to our cell therapy products, including with respect to required regulatory clearances and approvals in Japan, that could cause us to suspend or curtail our cell therapy sales operations in Japan;
- Quality issues could arise, requiring product recalls or other actions that could cause us reputational damage and lost sales;
- One or more of our key customers in Japan may decide to acquire competitive products, adopt other technological or therapeutics approaches to the conditions they treat, or otherwise reduce or cease their purchases of our products;
- Our Cytori Cell Therapy product trials may not achieve statistical significance and thus could diminish the perceived value and efficacy of our technology; and
- Our relatively small team in Japan may not be able to manage the needs of a growing business, and we may not able to hire and retain existing or new employees necessary to maintain and expand our business in Japan.

Further, a loss of one or more of our key customers, a dispute or disagreement with one of these key customers, a significant deterioration in the financial condition of one of these key customers, or a significant reduction in the amount of our products ordered by any key customer could adversely affect our revenue, results of operations and cash flows.

If we experience an interruption in supply from a material sole source supplier, our business may be harmed

We acquire some our components and other raw materials from sole source suppliers. If there is an interruption in supply of our raw materials from a sole source supplier, there can be no assurance that we will be able to obtain adequate quantities of the raw materials within a reasonable time or at commercially reasonable prices. Interruptions in supplies due to pricing, timing, availability or other issues with our sole source suppliers could have a negative impact on our ability to manufacture products and product candidates, which in turn could adversely affect commercial sales of our commercially available Cytori Cell Therapy products, delay our development and commercialization efforts and cause us to potentially breach our supply or other obligations under our agreements with certain other counterparties.

We source our Celase and Intravase reagents, which are used to process patients' autologous adipose (fat) tissue, under an exclusive manufacturing arrangement with Roche Diagnostics Corporation, or Roche. We do not have a second qualified supplier to manufacture these reagents, and we estimate that it would take approximately two years to qualify another manufacturing source for our reagents. If our agreement with Roche were to terminate or if Roche were otherwise unable to manufacture sufficient volumes of the reagents to meet our customer demand, our business could be materially and adversely affected.

We are dependent on sole source suppliers to manufacture the API (active pharmaceutical ingredient) and certain other components of our Cytori Nanomedicine drug candidates. There are no assurances that these sole source suppliers will enter into supply agreements with us to provide contractual assurance to us around supply and pricing. Regardless whether a sole source supplier enters into a written supply arrangement with us, such supplier could still delay, suspend or terminate supply of raw materials to us for

a number of reasons, including manufacturing or quality issues, payment disputes with us, bankruptcy or insolvency, or other occurrences.

If a sole source supplier ceases supply of raw materials necessary there is no guarantee that we will find an alternative supplier for the necessary raw materials on terms acceptable to us, or at all. Further the qualification process for a new vendor could take months or even years, and any such day in qualification could significantly harm our business.

We may engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

From time to time we may consider strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of products, product candidates or technologies. For example, in February 2017, we acquired intellectual property and a portfolio of investigational oncology therapies from Azaya Therapeutics. This acquisition materially impacted our liquidity and will materially increase our expenses (including a substantial increase in employee headcount). Further, growth of the Cytori Nanomedicine business will require significant management time and attention. Additional potential transactions that we may consider include a variety of different business arrangements, including spin-offs, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any such transaction may require us to incur non-recurring or other charges, may increase our near and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, these transactions may entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention in order to develop acquired products, product candidates or technologies;
- incurrence of substantial debt or dilutive issuances of equity securities to pay for acquisitions;
- higher than expected acquisition and integration costs;
- write-downs of assets or goodwill or impairment charges;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Accordingly, although there can be no assurance that we will undertake or successfully complete any additional transactions of the nature described above, any additional transactions that we do complete could have a material adverse effect on our business, results of operations, financial condition and prospects.

We are exposed to risks related to our international operations, and failure to manage these risks may adversely affect our operating results and financial condition.

We have operations in several regions around the world, including the United States, Japan, the Asia-Pacific region and Europe. Our global operations may be subject to risks that limit our ability to operate our business. We sell our products globally, which exposes us to a number of risks that can arise from international trade transactions, local business practices and cultural considerations, including, among others:

- political unrest, terrorism and economic or financial instability;
- unexpected changes and uncertainty in regulatory requirements;
- nationalization programs that may be implemented by foreign governments;
- import-export regulations;
- difficulties in enforcing agreements and collecting receivables;
- difficulties in ensuring compliance with the laws and regulations of multiple jurisdictions;
- changes in labor practices, including wage inflation, labor unrest and unionization policies;
- longer payment cycles by international customers;

- currency exchange fluctuations;
- disruptions of service from utilities or telecommunications providers, including electricity shortages;
- difficulties in staffing foreign branches and subsidiaries and in managing an expatriate workforce, and differing employment practices and labor issues; and
- potentially adverse tax consequences.

We also face risks associated with currency exchange and convertibility, inflation and repatriation of earnings as a result of our foreign operations. We are also vulnerable to appreciation or depreciation of foreign currencies against the U.S. dollar. Although we have significant operations in Asia, a substantial portion of transactions are denominated in U.S. dollars. As appreciation against the U.S. dollar increases, it will result in an increase in the cost of our business expenses abroad. Conversely, downward fluctuations in the value of foreign currencies relative to the U.S. dollar may make our products less price competitive than local solutions. From time to time, we may engage in currency hedging activities, but such activities may not be able to limit the risks of currency fluctuations.

We must maintain quality assurance certification and manufacturing approvals.

The manufacture of our products is, and the manufacture of any future drug and/or cell-related therapeutic products would be, subject to periodic inspection by regulatory authorities and distribution partners. The manufacture of drugs and devices products for human use is subject to regulation and inspection from time to time by the FDA for compliance with the FDA's cGMP (current good manufacturing practices), Quality System Regulation, or QSR requirements, as well as equivalent requirements and inspections by state and non-U.S. regulatory authorities. There can be no assurance that the FDA or other authorities will not, during the course of an inspection of existing or new facilities, identify what they consider to be deficiencies in our compliance with QSRs or other requirements and request, or seek remedial action.

Failure to comply with such regulations or a potential delay in attaining compliance may adversely affect our manufacturing activities and could result in, among other things, injunctions, civil penalties, FDA refusal to grant pre-market approvals or clearances of future or pending product submissions, fines, recalls or seizures of products, total or partial suspensions of production and criminal prosecution. There can be no assurance that after such occurrences that we will be able to obtain additional necessary regulatory approvals or clearances on a timely basis, if at all. Delays in receipt of or failure to receive such approvals or clearances, or the loss of previously received approvals or clearances could have a substantial negative effect on our results of operations and financial condition.

BARDA may terminate or suspend its agreement with us, or suspend, delay or reduce its funding of our development hereunder, which could delay and/or adversely affect our business and our ability to further develop DCCT-10.

In September 2012, we were awarded a contract, or the BARDA Agreement, with the Biomedical Advanced Research and Development Authority, or BARDA, a division of the U.S. Department of Health and Human Services. The objective of the BARDA Agreement is to develop our cell therapy technology for use as a new countermeasure for a combined injury involving thermal burn and radiation exposure that would be employed following a mass-casualty event. The original total value of the cost-plus-fixed-fee BARDA Agreement was up to an aggregate of $106 million, which aggregate potential value has decreased somewhat as we and BARDA have gained more insight into anticipated and actual budgets for different phases of our development work.

We have received over $23.5 million in cost-plus-fixed-fee funding from BARDA to fund our preclinical research, development, and clinical research to conduct a pilot clinical trial, referred to as RELIEF clinical trial, of Cytori Cell Therapy for thermal burn, or DCCT-10, and to fund development of our Celution cell processing system. There are additional contract options under the BARDA Agreement to provide over $60 million in additional funds to:

- conduct a pivotal clinical trial, and related clinical, regulatory, and other activities, with the objective of obtaining FDA approval for intravenous use of DCCT-10 in thermal burn injury; and
- conduct of clinical, regulatory and other tasks required to develop and obtain FDA clearance for other characteristics suitable for use in thermal burn injury following a mass casualty event.

In April 2017, we received approval of an Investigational Device Exemption, or IDE, from the FDA to conduct a pilot clinical trial of CCT in patients with thermal burn injuries. In May 2017, we announced BARDA's exercise of Option 2 of up to approximately $13.4 million to fund RELIEF. We initiated RELIEF in 2017 and expect to enroll first patients into this trial in 2018. But there can be no assurance that BARDA will agree to fund the entire cost of the trial. If BARDA declines to fund the full costs of the trial, we may be required to terminate our DCCT-10 development program.

BARDA may suspend or terminate the BARDA Agreement, or decline to enter into a new agreement upon termination of the BARDA Agreement, for a number of reasons, including our failure to achieve key objectives or milestones or failure to comply with the operating procedures and processes approved by BARDA and its audit agency, the Defense Contract Audit Agency. There can be no assurance that we will be able to comply with BARDA's operating procedures and processes, achieve the necessary clinical milestones or whether we will be able to successfully develop our DCCT-10 product candidate under the contract.

The BARDA contract has certain contracting requirements that allow the U.S. Government to unilaterally control its contracts. If the U.S. Government suspends, cancels, or otherwise terminates our contract with them, we could experience significant revenue shortfalls, and our financial condition and business may be adversely affected.

Contracts with U.S. Government agencies typically contain termination provisions unfavorable to the other party, and are subject to audit and modification by the U.S. Government at its sole discretion, which will subject us to additional risks. These risks include the ability of the U.S. Government to unilaterally:

- audit or object to our contract-related costs and fees, and require us to reimburse all such costs and fees;
- suspend or prevent us for a set period of time from receiving new contracts or extending our existing contracts based on violations or suspected violations of laws or regulations;
- cancel, terminate or suspend our contracts based on violations or suspected violations of laws or regulations;
- terminate our contracts if in the Government's best interest, including if funds become unavailable to the applicable governmental agency;
- reduce the scope and value of our contracts; and
- change certain terms and conditions in our contracts.

BARDA is able to terminate its contracts with us, either for its best interests or if we default by failing to perform in accordance with or to achieve the milestones set forth in the contract schedules and terms. Termination-for-convenience provisions generally enable us to recover only our costs incurred or committed and settlement expenses on the work completed prior to termination. Changes to, or an unexpected termination of, this contract could result in significant revenue shortfalls. If revenue shortfalls occur and are not offset by corresponding reductions in expenses, our business could be adversely affected. We cannot anticipate if, when or to what extent BARDA might revise, alter or terminate its contract with us in the future.

Under our contract with BARDA, our operations, and those of our contractors, are subject to audit by the U.S. Government, a negative outcome to which could adversely affect our financial conditions and business operations.

U.S. Government agencies, such as the Department of Health and Human Services, or DHHS, and the Defense Contract Audit Agency, or the DCAA, routinely audit and investigate government contractors and recipients of federal grants. These agencies evaluate a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards.

The DHHS and the DCAA also review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a contract will not be reimbursed, while such costs already reimbursed must generally be repaid. If an audit identifies improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including, but not limited to:

- termination of contracts;
- forfeiture of profits;
- suspension of payments;
- fines; and
- suspension or prohibition from conducting business with the U.S. Government.

If we are unable to identify, hire and/or retain key personnel, we may not be able to sustain or grow our business.

Our ability to operate successfully and manage our potential future growth depends significantly upon our ability to attract, retain, and motivate highly skilled and qualified research, technical, clinical, regulatory, sales, marketing, managerial and financial personnel. We compete for talent with numerous companies, as well as universities and non-profit research organizations. In the near term, we intend to hire a significant number of scientists, quality and regulatory personnel, and other technical staff with the requisite expertise to support and expand our Cytori Nanomedicine business. The manufacturing of these oncology drug assets is a highly complex process that requires significant experience and know-how. If we are unable to attract personnel with the necessary skills and

experience to reestablish and expand our Cytori Nanomedicine business, which is currently conducted out of our San Antonio, Texas facility, our business could be harmed.

Our future success also depends on the personal efforts and abilities of the principal members of our senior management and scientific staff to provide strategic direction, manage our operations, and maintain a cohesive and stable environment. In particular, we are highly dependent on our executive officers, especially Marc Hedrick, M.D., our Chief Executive Officer, and Tiago Girão, our Chief Financial Officer. Given their leadership, extensive technical, scientific and financial expertise and management and operational experience, these individuals would be difficult to replace. Consequently, the loss of services of one or more of these named individuals could result in product development delays or the failure of our collaborations with current and future collaborators, which, in turn, may hurt our ability to develop and commercialize products and generate revenues. We have not entered into any employment agreements with our executive officers or key personnel, nor do we maintain key man life insurance on the lives of any of the members of our senior management. Although we have a stock option plan pursuant to which we provide our executive officers with various economic incentives to remain employed with us, these incentives may not be sufficient to retain them. The loss of key personnel for any reason or our inability to hire, retain, and motivate additional qualified personnel in the future could prevent us from sustaining or growing our business.

Our restructuring activities may not be successful, and our restructuring activities may cause uncertainty regarding the future of our business and may adversely impact employee hiring and retention, our stock price and our results of operations and financial condition.

On September 1, 2017, we announced a corporate restructuring intended to significantly reduce expenses. The restructuring reduced our workforce by approximately 50%. The restructuring plan also includes renegotiating certain of our material contracts, such as the termination of a lease to move our headquarters announced on February 23, 2018, and reassessing certain other obligations.

Our ability to achieve the anticipated benefits, including the anticipated cost savings, of our restructuring activities within expected timeframes is subject to many estimates, assumptions and uncertainties. Additional restructuring or reorganization activities may also be required in the future, which could further increase the risks associated with these activities. There is no assurance that we will successfully implement, or fully realize the anticipated impact of, our restructuring or execute successfully on our restructuring plan, in the timeframes we desire or at all. If we fail to realize the anticipated benefits from these measures, or if we incur charges or costs in amounts that are greater than anticipated, our financial condition and operating results may be adversely affected. Additionally, our restructuring efforts, including a significant reduction in our employee headcount, may disrupt our staff and our business, and we may not be successful, or as successful, in advancing our existing Cytori Cell Therapy and Cytori Nanomedicine candidates, or in discovering or developing new Cytori Cell Therapy and Cytori Nanomedicine candidates as a result of lower staffing levels and potential reductions in our spending on these programs due to the restructuring.

The changes and potential changes to our operations and the workforce reduction measures as a result of the restructuring, may introduce uncertainty regarding our prospects and may result in disruption of our business. As a result of these actions, we incurred significant expenses and charges, including the approximately $570,000 charge incurred as a result of restructuring and cancelation of our San Diego headquarters lease announced on February 2018, and we may incur additional expenses and charges related to these actions. In addition, these changes and measures could distract our employees, decrease employee morale and make it more difficult to retain and hire new talent, and harm our reputation. These changes and activities caused our stock price to decline, and may cause it to further decline in the future. As a result of these or other similar risks, our business, results of operations and financial condition may be adversely affected.

We face potential product liability exposure, and if successful claims are brought against us, we may incur substantial liability if our insurance coverage for those claims is inadequate.

The commercial use of our products and clinical use of our products and product candidates expose us to the risk of product liability claims. This risk exists even if a product or product candidate is approved for commercial sale by applicable regulatory authorities and manufactured in facilities regulated by such authorities. Our products and product candidates are designed to affect important bodily functions and processes. Any side effects, manufacturing defects, misuse or abuse associated with our products or our product candidates could result in injury to a patient or even death. For example, ATI-0918 is cytotoxic, or toxic to living cells, and, if incorrectly or defectively manufactured or labeled, or incorrectly dosed or otherwise used in a manner not contemplated by its label, could result in patient harm and even death. In addition, a liability claim may be brought against us even if our products or product candidates merely appear to have caused an injury.

Product liability claims may be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products or product candidates, if approved, among others. If we cannot successfully

defend ourselves against product liability claims, we will incur substantial liabilities. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- the inability to commercialize our product candidates;
- decreased demand for our product candidates, if approved;
- impairment of our business reputation;
- product recall or withdrawal from the market;
- withdrawal of clinical trial participants;
- costs of related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants; or
- loss of revenues.

We have obtained product liability insurance coverage for commercial product sales and clinical trials with a $10 million per occurrence and annual aggregate coverage limit. Our insurance coverage may not be sufficient to cover all of our product liability related expenses or losses and may not cover us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost, in sufficient amounts or upon adequate terms to protect us against losses due to product liability. If we determine that it is prudent to increase our product liability coverage, we may be unable to obtain this increased product liability insurance on commercially reasonable terms or at all. Large judgments have been awarded in class action or individual lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and have a material adverse effect on our business, results of operations, financial condition and prospects.

Our employees, principal investigators, consultants and collaboration partners may engage in misconduct or other improper activities, including noncompliance with laws and regulatory standards and requirements and insider trading.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with manufacturing standards we have established, to comply with federal and state healthcare fraud and abuse laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations restrict or prohibit a wide range of activity relating to pricing, discounting, marketing and promotion, sales commissions, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation, or, given we are a listed company the United States, breach of insider trading laws. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such 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 significant fines or other sanctions.

Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act, the United Kingdom Bribery Act, and other anticorruption laws that apply in countries where we do business.

Anti-corruption laws generally prohibit us and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. We participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under these anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws or other laws including trade related laws. If we are not in compliance with these laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. Likewise, any investigation of any potential violations of these laws

by respective government bodies could also have an adverse impact on our reputation, our business, results of operations and financial condition.

A failure to adequately protect private health information could result in severe harm to our reputation and subject us to significant liabilities, each of which could have a material adverse effect on our business.

Throughout the clinical trial process, we may obtain the private health information of our trial subjects. There are a number of state, federal and international laws protecting the privacy and security of health information and personal data. As part of the American Recovery and Reinvestment Act 2009, or ARRA, Congress amended the privacy and security provisions of the Healthcare Information Portability and Accountability Act, or HIPAA. HIPAA imposes limitations on the use and disclosure of an individual's healthcare information by healthcare providers conducting certain electronic transactions, healthcare clearinghouses, and health insurance plans, collectively referred to as covered entities. The HIPAA amendments also impose compliance obligations and corresponding penalties for non-compliance on certain individuals and entities that provide services to or perform certain functions on behalf of healthcare providers and other covered entities involving the use or disclosure of individually identifiable health information, collectively referred to as business associates. ARRA also made significant increases in the penalties for improper use or disclosure of an individual's health information under HIPAA and extended enforcement authority to state attorneys general. The amendments also create notification requirements to federal regulators, and in some cases local and national media, for individuals whose health information has been inappropriately accessed or disclosed. Notification is not required under HIPAA if the health information that is improperly used or disclosed is deemed secured in accordance with certain encryption or other standards developed by the U.S. Department of Health and Human Services, or HHS. Most states have laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA. Many state laws impose significant data security requirements, such as encryption or mandatory contractual terms to ensure ongoing protection of personal information. Activities outside of the U.S. implicate local and national data protection standards, impose additional compliance requirements and generate additional risks of enforcement for non-compliance. The EU's Data Protection Directive, Canada's Personal Information Protection and Electronic Documents Act and other data protection, privacy and similar national, state/provincial and local laws may also restrict the access, use and disclosure of patient health information abroad. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws, to protect against security breaches and hackers or to alleviate problems caused by such breaches.

We and our collaborators must comply with environmental laws and regulations, including those pertaining to use of hazardous and biological materials in our business, and failure to comply with these laws and regulations could expose us to significant liabilities.

We and our collaborators are subject to various federal, state and local environmental laws, rules and regulations, including those relating to discharge of materials into the air, water and ground, those relating to manufacturing, storage, use, transportation and disposal of hazardous and biological materials, and those relating to the health and safety of employees with respect to laboratory activities required for the development of our products and activities. In particular, our Cytori Nanomedicine products and processes involve the controlled storage, use and disposal of certain cytotoxic, or toxic to living cells, materials. Even if we and these suppliers and collaborators comply with the standards prescribed by law and regulation, the risk of accidental contamination or injury from hazardous materials, or other violations of applicable environmental laws, rules or regulations cannot be completely eliminated. In the event of any violation of such laws, rules or regulations, we could be held liable for any damages that result, and any liability could exceed the limits or fall outside the coverage of any insurance we may obtain and could exceed our financial resources. We may not be able to maintain insurance on acceptable terms, or at all. We may incur significant costs in complying with environmental laws, rules and regulations.

Increased information technology security threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks, and products.

Increased global information technology security threats and more sophisticated and targeted computer crime pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data and communications. While we attempt to mitigate these risks by employing a number of measures, including employee refreshers, monitoring of our networks and systems, and maintenance of backup and protective systems, our systems, networks and products remain potentially vulnerable to advanced persistent threats. Depending on their nature and scope, such threats could potentially lead to the compromising of confidential information and communications, improper use of our systems and networks, manipulation and destruction of data, defective products, production downtimes and operational disruptions, which in turn could adversely affect our reputation, competitiveness and results of operations.

The results of the United Kingdom's referendum on withdrawal from the European Union may have a negative effect on global economic conditions, financial markets and our business.

In June 2016, a majority of voters in the United Kingdom elected to withdraw from the European Union in a national referendum. The referendum was advisory, and the terms of any withdrawal are subject to a negotiation period that could last at least two years after the government of the United Kingdom formally initiates a withdrawal process. Nevertheless, the referendum has created significant uncertainty about the future relationship between the United Kingdom and the European Union, including with respect to the laws and regulations that will apply as the United Kingdom determines which European Union laws to replace or replicate in the event of a withdrawal. The referendum has also given rise to calls for the governments of other European Union member states to consider withdrawal. These developments, or the perception that any of them could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could have a material adverse effect on our business, financial condition and results of operations and reduce the price of our securities.

Risks Relating to Our Intellectual Property

Our success depends in part on our ability to protect our intellectual property. It is difficult and costly to protect our proprietary rights and technology, and we may not be able to ensure their protection.

Our success depends in part on our ability to obtain and maintain patent, trademark and trade secret protection of our platform technology and current product candidates, including but not limited to our Cytori Cell Therapy and Cytori Nanomedicine products and product candidates, including Habeo Cell Therapy, ATI-0918 and ATI-1123, as well as successfully defending our intellectual property against third-party challenges. Our ability to stop unauthorized third parties from making using selling, offering to sell or importing our platform technology and/or our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we, or Azaya Therapeutics, as the case may be, might not have been the first to file patent applications for the covered inventions;
- it is possible that our pending patent applications will not result in issued patents;
- it is possible that there are dominating patents to our products of which we are not aware;
- it is possible that there are prior public disclosures that could invalidate our patents, of which we are not aware;
- it is possible that others may circumvent our patents;
- it is possible that there are unpublished applications or patent applications maintained in secrecy that may later issue with claims covering our products or technology similar to ours;
- the claims of our patents or patent applications, if and when issued, may not cover our system or products, or our system or product candidates;
- our owned or in-licensed issued patents may not provide us with any competitive advantages, or may be narrowed in scope, be held invalid or unenforceable as a result of legal administrative challenges by third parties;
- others may be able to make or use compounds that are the same or similar to the ATI-1123 product but that are not covered by the claims of our patents;
- we may not be able to detect infringement against our patents, which may be especially difficult for manufacturing processes or formulation patents, such as the patents/applications related to ATI-1123;
- the API in ATI-0918 is commercially available in generic drug products;
- we may not develop additional proprietary technologies for which we can obtain patent protection; or
- the patents of others may have an adverse effect on our business.

The patent positions of pharmaceutical, biopharmaceutical and medical device companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in patents in these fields has emerged to date in the United States. There have been recent changes regarding how patent laws are interpreted, and both the U.S. Patent and Trademark Office, or PTO, and Congress have recently made significant changes to the patent system. There have been three U.S. Supreme Court decisions that now show a trend of the Supreme Court which is distinctly negative on patents. The trend of these decisions along with resulting changes in patentability requirements being implemented by the U.S. Patent and Trademark Office could make it increasingly difficult for us to obtain and maintain patents

on our products. We cannot accurately predict future changes in the interpretation of patent laws or changes to patent laws which might be enacted into law. Those changes may materially affect our patents, our ability to obtain patents and/or the patents and applications of our collaborators and licensors. The patent situation in these fields outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in the patents we own or to which we have a license or third-party patents.

Intellectual property law outside the United States is uncertain and in many countries is currently undergoing review and revisions. The laws of some countries do not protect our patent and other intellectual property rights to the same extent as United States laws. Third parties may attempt to oppose the issuance of patents to us in foreign countries by initiating opposition proceedings. Opposition proceedings against any of our patent filings in a foreign country could have an adverse effect on our corresponding patents that are issued or pending in the United States. It may be necessary or useful for us to participate in proceedings to determine the validity of our patents or our competitors' patents that have been issued in countries other than the United States. This could result in substantial costs, divert our efforts and attention from other aspects of our business, and could have a material adverse effect on our results of operations and financial condition. We currently have pending patent applications in Europe, Australia, Japan, Canada, China, South Korea, Brazil, South Africa, among other jurisdictions.

Our intellectual property related to Cytori Nanomedicine was acquired from Azaya. As ATI-0918 is a generic drug, we did not acquire any patents related to ATI-0918. We acquired two issued patents and one patent application related to ATI-1123 from Azaya, and intend to file additional patent applications around our ATI-1123 drug candidate. There is no guaranty that any patent applications we file on ATI-1123 will issue, or if issued, that we will be to use and enforce these patents as an effective component of our intellectual property strategy.

Failure to obtain or maintain patent protection or protect trade secrets, for any reason (or third-party claims against our patents, trade secrets, or proprietary rights, or our involvement in disputes over our patents, trade secrets, or proprietary rights, including involvement in litigation), could have a substantial negative effect on our results of operations and financial condition.

We may not be able to protect our trade secrets.

We may rely on trade secrets to protect our technology, especially with respect to the Cytori Nanomedicine products, as well as in areas where we do not believe patent protection is appropriate or obtainable. Trade secrets are difficult to protect, and we have limited control over the protection of trade secrets used by our collaborators and suppliers. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, state laws in the Unites States vary, and their courts as well as courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. If our confidential or proprietary information is divulged to or acquired by third parties, including our competitors, our competitive position in the marketplace will be harmed and our ability to successfully penetrate our target markets could be severely compromised.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the device, biotechnology and pharmaceutical industries, we employ individuals who were previously employed at other device, biotechnology or pharmaceutical companies, including our competitors or potential competitors. 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 their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management, which would adversely affect our financial condition.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights, and we may be unable to protect our rights to our products and technology.

Litigation may be necessary to enforce or confirm the ownership of any patents issued or licensed to us, or to determine the scope and validity of third-party proprietary rights, which would result in substantial costs to us and diversion of effort on our part. If our competitors claim technology also claimed by us and prepare and file patent applications in the United States, we may have to participate in interference proceedings declared by the USPTO or a foreign patent office to determine priority of invention, which could result in substantial costs to and diversion of effort, even if the eventual outcome is favorable to us. Any such litigation or interference proceeding, regardless of outcome, could be expensive and time-consuming.

Successful challenges to our patents through oppositions, reexamination proceedings or interference proceedings could result in a loss of patent rights in the relevant jurisdiction. If we are unsuccessful in actions we bring against the patents of other parties, and it is determined that we infringe the patents of third-parties, we may be subject to litigation, prevented from commercializing potential products in the relevant jurisdiction and/or may be required to obtain licenses to those patents or develop or obtain alternative technologies, any of which could harm our business. Furthermore, if such challenges to our patent rights are not resolved in our favor, we could be delayed or prevented from entering into new collaborations or from commercializing certain products, which could adversely affect our business and results of operations.

Competitors or third parties may infringe on or upon our patents. We may be required to file patent infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable or that the third party's technology does not in fact infringe upon our patents. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our related pending patent applications at risk of not issuing. Litigation may fail and, even if successful, may result in substantial costs and be a distraction to our management. We may not be able to prevent misappropriation of our proprietary rights, particularly in countries outside the United States where patent rights may be more difficult to enforce. Further, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential or sensitive information could be compromised by disclosure in the event of litigation. In addition, during the course of litigation there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

If we are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in that litigation would have a material adverse effect on our business.

Our commercial success will also depend, in part, on our ability to avoid infringing on patents issued by others. There may be issued patents of third parties of which we are currently unaware, that are infringed or are alleged to be infringed by our product candidate or proprietary technologies. Because some patent applications in the United States may be maintained in secrecy until the patents are issued, patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our owned and in-licensed issued patents or our pending applications, or that we or, if applicable, a licensor were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering our product candidates or technology similar to ours. Any such patent application may have priority over our patent applications or patents, which could further require us to obtain rights to issued patents covering such technologies.

We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our product candidates and/or proprietary technologies infringe their intellectual property rights. These lawsuits are costly and could adversely affect our results of operations and divert the attention of managerial and technical personnel. There is a risk that a court would decide that we or our commercialization partners are infringing the third party's patents and would order us or our partners to stop the activities covered by the patents. In addition, there is a risk that a court will order us or our partners to pay the other party damages for having violated the other party's patents.

If a third-party's patent was found to cover our products, proprietary technologies or their uses, we could be enjoined by a court and required to pay damages and could be unable to commercialize our product candidates or use our proprietary technologies unless we or they obtained a license to the patent. A license may not be available to us on acceptable terms, if at all. In addition, during litigation, the patent holder could obtain a preliminary injunction or other equitable relief which could prohibit us from making, using or selling our products, technologies or methods pending a trial on the merits, which could be years away.

Risks Relating to the Securities Markets and an Investment in Our Stock

The market price of our common stock may be volatile and fluctuate significantly, which could result in substantial losses for stockholders.

The market price of our common stock has been, and may continue to be, subject to significant fluctuations. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this "Risk Factors" section and other factors, including:

- fluctuations in our operating results or the operating results of our competitors;
- the outcome of clinical trials involving the use of our products, including our sponsored trials;
- changes in estimates of our financial results or recommendations by securities analysts;
- variance in our financial performance from the expectations of securities analysts;
- changes in the estimates of the future size and growth rate of our markets;
- changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;
- conditions and trends in the markets we currently serve or which we intend to target with our product candidates;
- changes in general economic, industry and market conditions;
- success of competitive products and services;
- changes in market valuations or earnings of our competitors;
- announcements of significant new products, contracts, acquisitions or strategic alliances by us or our competitors;
- our continuing ability to list our securities on an established market or exchange;
- the timing and outcome of regulatory reviews and approvals of our products;
- the commencement or outcome of litigation involving our company, our general industry or both;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- actual or expected sales of our common stock by the holders of our common stock; and
- the trading volume of our common stock.

In addition, the stock market in general, the Nasdaq markets and the market for cell therapy development companies in particular may experience a loss of investor confidence. A loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, our financial condition or results of operations, which may materially harm the market price of our common stock and result in substantial losses for stockholders.

Future sales of our common stock may depress our share price.

As of December 31, 2017, we had 57,825,729 shares of our common stock outstanding. Sales of a number of shares of common stock in the public market, including pursuant to the Lincoln Park Purchase Agreement, or our ATM program, or the expectation of such sales, could cause the market price of our common stock to decline. We may also sell additional common stock or securities convertible into or exercisable or exchangeable for common stock in subsequent public or private offerings or other transactions, which may adversely affect the market price of our common stock.

We have granted demand registration rights for the resale of certain shares of our common stock to each of Astellas Pharma Inc. and Green Hospital Supply, Inc. pursuant to common stock purchase agreements previously entered into with each of these stockholders. An aggregate of approximately 300,000 shares of our common stock are subject to these demand registration rights. If we receive a written request from any of these stockholders to file a registration statement under the Securities Act of 1933, as amended, or the Securities Act, covering its shares of unregistered common stock, we are required to use reasonable efforts to prepare and file with the SEC within 30 business days of such request a registration statement covering the resale of the shares for an offering to be made on a continuous basis pursuant to Rule 415 under the Securities Act.

Our stockholders may experience substantial dilution in the value of their investment if we issue additional shares of our capital stock.

Our charter allows us to issue up to 75,000,000 shares of our common stock and to issue and designate the rights of, without stockholder approval, up to 5,000,000 shares of preferred stock. To raise additional capital, we may in the future sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that are lower than the prices paid by existing stockholders, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders, which could result in substantial dilution to the interests of existing stockholders.

We could be delisted from Nasdaq, which could seriously harm the liquidity of our stock and our ability to raise capital.

Following notice from Nasdaq staff in June 2015 and December 2015, we had a hearing in January 2016 relating to our noncompliance with the $1.00 minimum bid price per share requirement. The Nasdaq Hearing Panel granted us until May 31, 2016 to come into compliance with the minimum bid price requirement, including requirements relating to obtaining stockholders approval of a reverse stock split that would bring our stock price above $1.00 per share for a minimum of 10 consecutive trading days. We transferred the listing of our common stock from the Nasdaq Global Market to the Nasdaq Capital Market in February 2016. In May 2016, we consummated a 1-for-15 reverse stock split pursuant to which the minimum bid price per share of our common stock rose above $1.00. Pursuant to a letter dated May 26, 2016, the Nasdaq staff delivered notice to us that we had regained compliance with Nasdaq's minimum bid price rule.

On September 5, 2017, we received notice from Nasdaq staff relating to our noncompliance with the $1.00 minimum bid price per share requirement. Pursuant to Nasdaq Listing Rule 5810(c)(3)(A), we were granted a 180 calendar day compliance period, or until March 5, 2018, to regain compliance with the minimum bid price requirement. To regain compliance, the closing bid price of our shares of common stock must meet or exceed $1.00 per share for at least 10 consecutive business days during the 180 calendar day compliance period. We requested an additional 180 calendar day compliance period, or until September 4, 2018, to regain compliance and was granted such extension on March 6, 2018. During the additional compliance period, our shares of common stock will continue to be listed and traded on Nasdaq.

In our request for an additional 180 calendar day compliance period we notified Nasdaq of our intention to cure the minimum bid price deficiency by effecting a reverse stock split, if necessary. However, if we are notable to cure the deficiency, or if we are otherwise not eligible, Nasdaq would notify us that our securities would be subject to delisting. In the event of such a notification, we may appeal the Nasdaq staff's determination to delist our securities, but there can be no assurance the Nasdaq staff would grant our request for continued listing.

If we cease to be eligible to trade on the Nasdaq Capital Market:

- We may have to pursue trading on a less recognized or accepted market, such as the OTC Bulletin Board or the "pink sheets."
- The trading price of our common stock could suffer, including an increased spread between the "bid" and "asked" prices quoted by market makers.
- Shares of our common stock could be less liquid and marketable, thereby reducing the ability of stockholders to purchase or sell our shares as quickly and as inexpensively as they have done historically. If our stock is traded as a "penny stock," transactions in our stock would be more difficult and cumbersome.
- We may be unable to access capital on favorable terms or at all, as companies trading on alternative markets may be viewed as less attractive investments with higher associated risks, such that existing or prospective institutional investors may be less interested in, or prohibited from, investing in our common stock. This may also cause the market price of our common stock to decline.

We may be or become the target of securities litigation, which is costly and time-consuming to defend.

In the past, following periods of market volatility in the price of a company's securities, the reporting of unfavorable news or continued decline in a company's stock price, security holders have often instituted class action litigation. The market value of our securities has steadily declined over the past several years for a variety of reasons, including the announcement of the results of our STAR clinical trial in July 2017, and for other reasons discussed elsewhere in this "Risk Factors" section, which heightens our litigation risk. If we face such litigation, we could incur substantial legal costs and our management's attention could be diverted from the operation of our business, causing our business to suffer. Any adverse determination in any such litigation or any amounts paid to settle any such actual or threatened litigation could require that we make significant payments.

We may issue debt and equity securities or securities convertible into equity securities, any of which may be senior to our common stock as to distributions and in liquidation, which could negatively affect the value of our common stock.

In the future, we may attempt to increase our capital resources by entering into debt or debt-like financing that is unsecured or secured by up to all of our assets, or by issuing additional debt or equity securities, which could include issuances of secured or unsecured commercial paper, medium-term notes, senior notes, subordinated notes, guarantees, preferred stock, hybrid securities, or securities convertible into or exchangeable for equity securities. In the event of our liquidation, our lenders and holders of our debt and preferred securities would receive distributions of our available assets before distributions to the holders of our common stock. Because our decision to incur debt and issue securities in future offerings may be influenced by market conditions and other factors

beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings or debt financings. Further, market conditions could require us to accept less favorable terms for the issuance of our securities in the future.

If you hold warrants issued pursuant to our rights offerings, you may be limited in your ability to engage in certain hedging transactions that could provide you with financial benefits.

In June 2016, we closed our 2016 rights offering to subscribe for units at a subscription price of $2.55 per unit, or the 2016 Rights Offering. Pursuant to the 2016 Rights Offering, we sold to our stockholders of record (as of May 20, 2016) an aggregate of 6,704,852 units consisting of 6,704,852 shares of common stock and 3,352,306 warrants, or CYTXW Warrants, with each CYTXW Warrant exercisable for one share of common stock at an exercise price of $3.06 per share.

In November 2017, we closed our 2017 rights offering to subscribe for units at a subscription price of $1,000 per unit, or the 2017 Rights Offering (together with the 2016 Rights Offering, the Rights Offerings). Pursuant to the 2017 Rights Offering, we sold to our stockholders of record (as of October 27, 2017) an aggregate of 10 million units consisting of 10,000 shares of Series B Convertible Preferred stock and 18,000,000 warrants, or CYTXS Warrants (together with the CYTXW Warrants the, Warrants), with each CYTXS Warrant exercisable for one share of common stock at an exercise price of $0.3333 per share. Holders of Warrants and CYTXS Warrants were required to represent to us that they will not enter into any short sale or similar transaction with respect to our common stock for so long as they continue to hold Warrants or CYTXS Warrants. These requirements prevent our Warrant holders from pursuing certain investment strategies that could provide them greater financial benefits than they might have realized had they not been required to make this representation.

Absence of a public trading market for the CYTXW Warrants may limit the ability to resell the CYTXW Warrants.

The CYTXW Warrants are listed for trading on Nasdaq under the symbol “CYTXW,” but there can be no assurance that a robust market will exist for the CYTXW Warrants. Even if a market for the CYTXW Warrants does develop, the price of the CYTXW Warrants may fluctuate and liquidity may be limited. If the CYTXW Warrants cease to be eligible for continued listing on Nasdaq, or if the market for the CYTXW Warrants does not fully develop (or subsequently weakens), then purchasers of the CYTXW Warrants may be unable to resell the CYTXW Warrants or sell them only at an unfavorable price for an extended period of time, if at all. Future trading prices of the CYTXW Warrants will depend on many factors, including:

- our operating performance and financial condition;
- our ability to continue the effectiveness of the registration statement covering the CYTXW Warrants and the common stock issuable upon exercise of the CYTXW Warrants;
- the interest of securities dealers in making and maintaining a market; and
- the market for similar securities.

Absence of a public trading market for the CYTXS Warrants may limit your ability to resell the Warrants.

There is no established trading market for the CYTXS Warrants issued pursuant to this 2017 Rights Offering, and the CYTXS Warrants may not be widely distributed. We have applied to list the CYTXS Warrants for trading on Nasdaq under the symbol “CYTXS,” but there can be no assurance that the CYTXS Warrants will meet minimum listing criteria to be accepted for listing on Nasdaq or that a market will develop for the CYTXS Warrants. Even if a market for the CYTXS Warrants does develop, the price of the CYTXS Warrants may fluctuate and liquidity may be limited. If the CYTXS Warrants are not accepted for listing on Nasdaq or if a market for the CYTXS Warrants does not develop, then purchasers of these warrants may be unable to resell them or sell them only at an unfavorable price for an extended period of time, if at all. Future trading prices of the CYTXS Warrants will depend on many factors, including:

- our operating performance and financial condition;
- our ability to continue the effectiveness of the registration statement, of which this prospectus is a part, covering the CYTXS Warrants and the common stock issuable upon exercise of the CYTXS Warrants;
- the interest of securities dealers in making a market; and
- the market for similar securities.

The market price of our common stock may fall below or never exceed the exercise price of the Warrants issued in connection with the Rights Offerings.

The CYTXW Warrants issued pursuant to the 2016 Rights Offering became exercisable upon issuance and will expire thirty (30) months from the date of issuance. The market price of our common stock may never exceed the exercise price of the CYTXW Warrants prior to their date of expiration. The CYTXS Warrants issued pursuant to the 2017 Rights Offering become exercisable

upon approval of the increase in authorized shares by our stockholders and will expire thirty (30) months thereafter. The market price of our common stock may fall below the exercise price of the CYTXS Warrants prior to their date of expiration and before holders have exercised the CYTXS Warrants. Any Warrants not exercised by their date of expiration will expire worthless and we will be under no further obligation to the Warrant holder.

The Warrants contain features that may reduce Warrant holders' economic benefit from owning them.

The Warrants contain features that allow us to redeem the Warrants and that prohibit Warrant holders from engaging in certain investment strategies. We may redeem the CYTXW Warrants for $0.01 per CYTXW Warrant once the closing price of our common stock has equaled or exceeded $7.65 per share, subject to adjustment, for ten consecutive trading days, provided that we may do so only upon not less than thirty (30) days' prior written notice of redemption. We may redeem the CYTXS Warrants for $0.01 per CYTXS Warrant once the closing price of our common stock has equaled or exceeded $0.8333 per share, subject to adjustment, for ten consecutive trading days, provided that we may not do so prior to the first anniversary of closing of the 2017 Rights Offering, and only upon not less than thirty (30) days' prior written notice of redemption. If we give notice of redemption, applicable Warrant holders will be forced to sell or exercise their Warrants or accept the redemption price. The notice of redemption could come at a time when it is not advisable or possible for Warrant holders to exercise the Warrants. As a result, Warrant holders may be unable to benefit from owning the Warrants being redeemed. In addition, for so long as Warrant holders continue to hold Warrants, they will not be permitted to enter into any short sale or similar transaction with respect to our common stock. This could prevent Warrant holders from pursuing investment strategies that could provide them greater financial benefits from owning the Warrants.

Since the Warrants are executory contracts, they may have no value in a bankruptcy or reorganization proceeding.

In the event a bankruptcy or reorganization proceeding is commenced by or against us, a bankruptcy court may hold that any unexercised Warrants are executory contracts that are subject to rejection by us with the approval of the bankruptcy court. As a result, holders of the Warrants may, even if we have sufficient funds, not be entitled to receive any consideration for their Warrants or may receive an amount less than they would be entitled to if they had exercised their Warrants prior to the commencement of any such bankruptcy or reorganization proceeding.

Our charter documents contain anti-takeover provisions.

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws could discourage, delay or prevent a merger, acquisition or other change of control that stockholders may consider favorable. These provisions could also prevent or frustrate attempts by our stockholders to replace or remove members of our Board of Directors. Stockholders who wish to participate in these transactions may not have the opportunity to do so. These provisions:

- authorize our Board of Directors to issue without stockholder approval up to 5,000,000 shares of preferred stock, the rights of which will be determined at the discretion of the Board of Directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and cannot be taken by written consent;
- establish advance notice requirements for stockholder nominations to our Board of Directors or for stockholder proposals that can be acted on at stockholder meetings; and
- limit who may call stockholder meetings.

We are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of the voting rights on our common stock, from merging or combining with us for a prescribed period of time.

We presently do not intend to pay cash dividends on our common stock.

We have never paid cash dividends in the past, and we currently anticipate that no cash dividends will be paid on the common stock in the foreseeable future. Furthermore, our Loan and Security Agreement with Oxford currently prohibits our issuance of cash dividends. This could make an investment in our common stock inappropriate for some investors, and may serve to narrow our potential sources of additional capital. While our dividend policy will be based on the operating results and capital needs of the business, it is anticipated that all earnings, if any, will be retained to finance the future expansion of our business.

If securities and/or industry analysts fail to continue publishing research about our business, if they change their recommendations adversely, or if our results of operations do not meet their expectations, our stock price and trading volume could decline.

The trading market for our common stock may be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company 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. In addition, it is likely that in some future period our operating results will be below the expectations of securities analysts or investors. If one or more of the analysts who cover us downgrade our stock, or if our results of operations do not meet their expectations, our stock price could decline.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We lease 17,535 square feet at 3020 and 3030 Callan Road, San Diego, California that we use for our corporate headquarters and manufacturing facilities. The related lease agreement, as amended, provides for a monthly rent that commenced at a rate of $1.50 per square foot. The lease term is on a month-to-month basis, commenced on November 1, 2017 and expires on December 31, 2018.

We also entered into two lease agreements for our San Antonio, Texas locations. We pay an aggregate of approximately $12,000 in rent per month for these properties. The leases for these properties will expire in June 2022.

Additionally, we entered into several lease agreements for international office locations. For these properties, we pay an aggregate of approximately $35,000 in rent per month. The lease for the property in Japan will expire in April 2022 and the lease for the property in the United Kingdom will expire in June 2019.

Item 3. Legal Proceedings

From time to time, we have been involved in routine litigation incidental to the conduct of our business. As of December 31, 2017, we were not a party to any material legal proceeding.

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 Prices

From August 2000 (our initial public offering in Germany) until September 2007, our common stock was quoted on the Frankfurt Stock Exchange under the symbol "XMPA" (formerly XMP). In September 2007, our stock closed trading on the Frankfurt Stock Exchange. In December 2005, our common stock commenced trading on the Nasdaq Capital Market under the symbol "CYTX." From December 2005 until February 2006, our common stock traded on the Nasdaq Capital Market, from February 2006 until February 2016, it traded on the Nasdaq Global Market, and since February 2016, it has traded on the Nasdaq Capital Market. Our common stock has, from time to time, traded on a limited, sporadic and volatile basis. The following tables show the high and low sales prices for our common stock for the periods indicated, as reported on the Nasdaq Global Market or the Nasdaq Capital Market, as applicable. These prices do not include retail markups, markdowns or commissions.

Common Stock

	High	Low
2016		
Quarter ended March 31, 2016	$ 3.30	$ 1.95
Quarter ended June 30, 2016	$ 5.25	$ 2.00
Quarter ended September 30, 2016	$ 2.25	$ 1.83
Quarter ended December 31, 2016	$ 2.00	$ 1.36
2017		
Quarter ended March 31, 2017	$ 1.99	$ 1.53
Quarter ended June 30, 2017	$ 1.72	$ 0.92
Quarter ended September 30, 2017	$ 1.17	$ 0.31
Quarter ended December 31, 2017	$ 0.63	$ 0.23

All of our outstanding shares have been deposited with the Depository Trust & Clearing Corporation (DTCC) since December 9, 2005.

As of January 31, 2018, we had approximately 26 record holders of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of individual stockholders represented by these record holders.

Dividends

We have never declared or paid any dividends on our common stock and do not anticipate paying any in the foreseeable future. Furthermore, our Loan and Security Agreement currently prohibits our issuance of cash dividends on common stock.

Equity Compensation Plan Information

The following table gives information as of December 31, 2017 about shares of our common stock that may be issued upon the exercise of outstanding options, and shares remaining available for issuance under all of our equity compensation plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a)) (c)
Equity compensation plans not approved by security holders (1)	175,529	$ 56.83	—
Equity compensation plans not approved by security holders (2)	822,859	$ 2.55	2,060,504
Equity compensation plans not approved by security holders (3)	12,500	$ 0.99	304,166
Total	1,010,888	$ 11.96	2,364,670

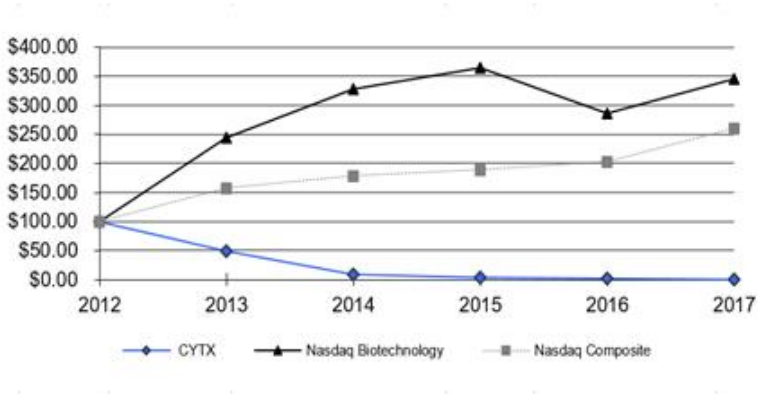
(1) The 2004 Stock Option and Stock Purchase Plan expired in August 2014.

(2) See Notes to the Consolidated Financial Statements included elsewhere herein for a description of our 2014 Equity Incentive Plan.

(3) See Notes to the Consolidated Financial Statements included elsewhere herein for a description of our 2015 New Employee Incentive Plan.

Comparative Stock Performance Graph

The following graph shows how an initial investment of $100 in our common stock would have compared to an equal investment in the Nasdaq Composite Index and the Nasdaq Biotechnology Index during the period from December 31, 2012 through December 31, 2017. The performance shown is not necessarily indicative of future price performance.



Item 6. Selected Financial Data

The selected data presented below under the captions "Statements of Operations Data," "Statements of Cash Flows Data" and "Balance Sheet Data" for, and as of the end of, each of the years in the two-year period ended December 31, 2017, are derived from, and should be read in conjunction with, our audited consolidated financial statements. The consolidated balance sheets as of December 31, 2017 and 2016, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2017 and 2016, which have been audited by BDO USA, LLP, an independent registered public accounting firm, and their report thereon, is included elsewhere in this Annual Report.

The information contained in this table should also be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and related notes thereto included elsewhere in this report:

Consolidated Statements of Operations and Comprehensive Loss (in thousands)

	For the Years Ended December 31,	
	2017	2016
Product revenues	$ 2,689	$ 4,656
Cost of product revenues	1,318	2,170
Amortization of intangible assets	1,225	545
Gross profit	146	1,941
Development revenues:		
Government contracts and other	3,722	6,724
	3,722	6,724
Operating expenses:		
Research and development	11,678	16,197
Sales and marketing	3,593	3,611
General and administrative	7,594	8,563
In process research and development acquired from Azaya	1,686	—
Total operating expenses	24,551	28,371
Operating loss	(20,683)	(19,706)
Other income (expense):		
Interest income	33	19
Interest expense	(2,049)	(2,592)
Other income, net	13	233
Total other expense	(2,003)	(2,340)
Net loss	$ (22,686)	$ (22,046)
Beneficial conversion feature for convertible preferred stock	(3,977)	—
Net loss allocable to common stockholders	$ (26,663)	$ (22,046)
Basic and diluted net loss per share allocable to common stockholders	$ (0.82)	$ (1.28)
Basic and diluted weighted average shares used in calculating net loss per share allocable to common stockholders	32,389,831	17,290,933
Comprehensive loss:		
Net loss	$ (22,686)	$ (22,046)
Other comprehensive income – foreign currency translation adjustments	129	262
Comprehensive loss	$ (22,557)	$ (21,784)

Consolidated Statements of Cash Flows (in thousands)

	For the Years Ended December 31, 2017	2016
Net cash used in operating activities	$ (18,128)	$ (19,533)
Net cash provided by (used in) used in investing activities	(1,708)	64
Net cash provided by financing activities	16,815	17,609
Effect of exchange rate changes on cash and cash equivalents	11	82
Net decrease in cash and cash equivalents	(3,010)	(1,778)
Cash and cash equivalents at beginning of year	12,560	14,338
Cash and cash equivalents at end of year	$ 9,550	$ 12,560

Consolidated Balance Sheet Details (in thousands)

	As of December 31, 2017	2016
Cash and cash equivalents	$ 9,550	$ 12,560
Working capital (deficit)	(3,550)	6,246
Total assets	31,615	34,609
Deferred revenues	94	97
Long-term deferred rent and other	107	17
Long-term obligations, net of discount, less current portion	—	11,008
Total stockholders' equity	13,000	10,986

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Our objective is to build a profitable and growing specialty therapeutics company. To meet this objective, we have acquired and are developing two technology platforms that hold promise for treating millions of patients and represent significant potential for increasing shareholder value. Our current corporate activities fall substantially into advancing these platforms: Cytori Cell Therapy and Cytori Nanomedicine.

Cytori Cell Therapy, or CCT, is based on the scientific discovery that the human adipose or fat tissue compartment is a source of a unique mixed population of stem, progenitor and regenerative cells that may hold substantial promise in the treatment of numerous diseases and conditions. To bring this promise to health providers and their patients, we are developing novel therapies prepared and administered at the patient's bedside with proprietary technologies that include therapy-specific reusable, automated, standardized Celution devices, single-use Celution consumable sets, Celase reagent, and Intravase reagent. Our lead product candidate, Habeo™ Cell Therapy, was evaluated in a Cytori-sponsored U.S. randomized, placebo-controlled, double-blind, multi-center clinical trial, STAR (**S**cleroderma **T**reatment with Celution Processed **A**dipose Derived **R**egenerative Cells), for the treatment of impaired hand function in patients with scleroderma. On July 24, 2017, we announced top-line, preliminary data and presented the full data analysis on October 18, 2017. The STAR trial enrolled and evaluated 88 patients with scleroderma, including 51 patients within the diffuse cutaneous subset and 37 with limited cutaneous scleroderma. While the primary and secondary endpoints did not reach statistical significance at 24 or 48 weeks, the trial data reported clinically meaningful improvement in the primary and secondary endpoints of both hand function and scleroderma-associated functional disability, for Habeo treated patients compared to placebo, in the pre-specified subgroup of patients with diffuse cutaneous scleroderma. Further, on January 22, 2018, we announced the investigator-initiated and Cytori-supported SCLERADEC-II clinical trial in France using Habeo Cell Therapy completed its enrollment and data is anticipated in the second half of 2018. Additional CCT treatments are in various stages of development in the areas of urology, wounds, and orthopedics. Further, our CCT platform is the subject of investigator-initiated trials conducted by our partners, licensees and other third parties, some of which are supported by us and/or funded by government agencies and other funding sources, detailed in an announcement on November 13, 2017. Currently, we internally manufacture the Celution devices and consumables in the United States and the United Kingdom and source our Celase and Intravase reagents from a third-party supplier. We are exploring contract manufacturing organization options for the Celution System to reduce overhead and product costs of goods sold. We also have obtained regulatory approval to sell some of our CCT products, including our Celution devices and consumables and associated reagents, in certain markets outside the U.S. In those markets, we have been able to further develop and improve our core technologies, gain expanded clinical and product experience and data, and generate sales.

The Cytori Nanomedicine platform features a versatile liposomal nanoparticle technology for drug encapsulation that has thus far provided the foundation to bring two promising drugs into early/late stage clinical trials. Nanoparticle encapsulation is promising

because it can help improve the delivery and metabolism of many drugs, thus potentially enhancing the therapeutic profile and patient benefits. Our lead drug candidate, ATI-0918 is a generic version of pegylated liposomal encapsulated doxorubicin. Pegylated liposomal encapsulated doxorubicin is a heavily relied upon chemotherapeutic used in many cancer types on a global basis. We believe that data from a 60-patient European study of ATI-0918 has met the statistical criteria for bioequivalence to Janssen's Caelyx®, the current reference listed drug in Europe. We intend that these bioequivalence data will serve as a basis for our planned regulatory submission to the European Medicines Agency, or EMA, for ATI-0918. We are currently evaluating our strategic options to bring ATI-0918 to the U.S., China, and other markets. Our second nanomedicine drug candidate is ATI-1123, a novel and new chemical entity which is a nanoparticle-encapsulated form of docetaxel, also a workhorse chemotherapeutic drug used for many cancers. A Phase I clinical trial of ATI-1123 has been completed and published, and we are investigating possible expansion of this trial to Phase II, most likely in conjunction with a development partner. Finally, in connection with our acquisition of the ATI-0918 and ATI-1123 drug candidates, we have acquired know-how (including proprietary processes and techniques) and a scalable nanoparticle manufacturing plant in San Antonio, Texas from which we intend to test, validate and eventually manufacture commercial quantities of our nanoparticle drugs.

Results of Operations

Product revenues

Product revenues consisted of revenues primarily from the sale of our Cytori Cell Therapy-related products.

The following table summarizes the components for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
Product revenues - third party	$ 2,689	$ 4,656

A majority of our product revenue in 2017 and 2016 was derived from Japan. Two new regenerative medicine laws in Japan went into effect in November 2014, removing regulatory uncertainties and providing a clear path for us to offer Cytori Cell Therapy in Japan, where our technology is mainly being used in the aesthetics and orthopedic fields. Further, we expect continued demand from researchers at academic hospitals seeking to perform investigator-initiated and funded studies.

We experienced a decrease of $2.0 million in product revenue during the year ended December 31, 2017 as compared to 2016, primarily due to decrease in the number of Celution device sales in Japan of approximately $1.4 million and product revenues in the Americas of $0.6 million, but partially offset by an increase in our Celution consumable utilization in Japan.

The future: We expect to continue to generate increased consumable utilization and a majority of product revenues from the sale of Cytori Cell Therapy-related products to researchers, clinicians, and distributors in all regions. In Japan and EMEA, researchers will use our technology in ongoing and new investigator-initiated and funded studies focused on, but not limited to, hand scleroderma, Crohn's disease, peripheral artery disease, erectile dysfunction, liver cirrhosis, and diabetic foot ulcers.

Cost of product revenues

Cost of product revenues relate primarily to Cytori Cell Therapy-related products and includes material, manufacturing labor, and overhead costs, as well as amortization of intangible assets. The following table summarizes the components of our cost of revenues for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
Cost of product revenues	$ 1,294	$ 2,128
Amortization of intangible assets	1,225	546
Share-based compensation	24	41
Total cost of product revenues	$ 2,543	$ 2,715
Total cost of product revenues as % of product revenues	95%	58%

Cost of product revenues as a percentage of product revenues was 95% and 58% for the years ended December 31, 2017 and 2016, respectively. Fluctuation in this percentage is due to our product mix, distributor and direct sales mix, geographic mix, foreign exchange rates, idle capacity, allocation of overhead, and higher intangible amortization expense, which increased by approximately $0.7 million in 2017 compared to 2016.

The future: We expect to continue to see variation in our gross profit margin as the product mix, distributor and direct sales mix and geographic mix comprising revenues fluctuate. We are investigating various pricing options for our cellular therapeutics, which may help to increase our gross profit margins in 2018 and beyond.

Development revenues

Under our government contract with BARDA, we recognized a total of $3.7 million and $6.7 million in development revenues for the years ended December 31, 2017 and 2016, respectively which included allowable fees as well as cost reimbursements. During the years ended December 31, 2017 and 2016, we incurred $3.5 million and $6.3 million in qualified expenditures, respectively. The decrease in revenues for the years ended December 31, 2017 as compared to 2016 is primarily due to decreases in research and development activities related to our contract with BARDA as we began a new clinical phase of the contract.

The future: We entered into a contract amendment with BARDA in May 2017 for the initiation of the RELIEF pilot clinical trial of DCCT-10 in thermal burn injury. The amendment extends the term of the BARDA Agreement and the period of performance of Option 2 of the BARDA Agreement to November 30, 2020. We expect to begin enrollment of patients into the RELIEF trial in 2018.

Research and development expenses

Research and development expenses relate to the development of a technology platform that involves using adipose tissue as a source of autologous regenerative cells for therapeutic applications, oncology drug program expenses, as well as the continued development efforts related to our clinical trials.

Research and development expenses include costs associated with the design, development, testing and enhancement of our products, payment of regulatory fees, laboratory supplies, pre-clinical studies and clinical studies.

The following table summarizes the components of our research and development expenses for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
General research and development	$ 11,540	$ 15,846
Share-based compensation	138	351
Total research and development expenses	$ 11,678	$ 16,197

The decrease in research and development expenses, excluding share-based compensation for the year ended December 31, 2017 as compared to 2016 is due to a decrease of approximately $3.1 million in clinical studies and related professional services as a result of completion of enrollment in our U.S. clinical trials enrolling in 2016 as well as the decrease related to BARDA related expenditures, and a decrease of $1.2 million in salaries and benefits as a result of the restructuring activities we implemented in September 2017.

The future: We expect aggregate research and development expenditures remain at current levels for 2018, as we begin enrollment of our RELIEF clinical trial and our ongoing development efforts of ATI-0918.

Sales and marketing expenses

Sales and marketing expenses include costs of sales and marketing personnel, events and tradeshows, customer and sales representative education and training, primary and secondary market research, and product and service promotion. The following table summarizes the components of our sales and marketing expenses for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
Sales and marketing	$ 3,477	$ 3,444
Share-based compensation	116	167
Total sales and marketing expenses	$ 3,593	$ 3,611

Sales and marketing expenses excluding share-based compensation presented no material variance for the year ended December 31, 2017 as compared to 2016.

The future: We expect sales and marketing expenditures to slightly decrease during 2018, as we delay efforts on commercial readiness activities for Habeo in the U.S.

General and administrative expenses

General and administrative expenses include costs for administrative personnel, legal and other professional expenses, and general corporate expenses. The following table summarizes the general and administrative expenses for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
General and administrative	$ 7,119	$ 8,042
Share-based compensation	475	521
Total general and administrative expenses	$ 7,594	$ 8,563

General and administrative expenses excluding share-based compensation decreased by $0.9 million for the year ended December 31, 2017, as compared to 2016 primarily due to decreases in salary and related benefits expense consistent with our ongoing cost curtailment efforts and restructuring implemented in September 2017.

The future: We expect general and administrative expenditures to slightly decrease during 2018, as we benefit from full year of cost curtailment efforts implemented in September 2017.

Share-based compensation expenses

Share-based compensation expenses include charges related to options and restricted stock awards issued to employees, directors and non-employees along with charges related to the employee stock purchases under the Employee Stock Purchase Plan, or ESPP. We measure stock-based compensation expense based on the grant-date fair value of any awards granted to our employees. Such expense is recognized over the requisite service period.

The following table summarizes the components of our share-based compensation expenses for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
Cost of product revenues	$ 24	$ 41
Research and development-related	138	351
Sales and marketing-related	116	167
General and administrative-related	475	521
Total share-based compensation	$ 753	$ 1,080

The decrease in share-based compensation expenses for the year ended December 31, 2017 as compared to 2016 is primarily related to a lower annual grant activity caused by reductions in headcount and due to the decline in the stock price during 2017 as compared to 2016, and its corresponding impact on share-based compensation.

The future: We expect to continue to grant options and stock awards (which will result in an expense) to our employees, directors, and, as appropriate, to non-employee service providers. In addition, previously-granted options will continue to vest in accordance with their original terms. As of December 31, 2017, the total compensation cost related to non-vested stock options and stock awards not yet recognized for all our plans is approximately $0.6 million which is expected to be recognized as a result of vesting under service conditions over a weighted average period of 1.52 years.

In process research and development acquired from Azaya Therapeutics

In February 2017, we entered into an agreement to acquire assets, including in process research and development, or IPR&D, related to two oncology drug product candidates, from Azaya Therapeutics. In connection with this agreement, we recorded an IPR&D charge totaling $1.7 million. The acquired IPR&D is in the early stage of development and has no alternative use. Additional research, pre-clinical studies, and regulatory approvals must be successfully completed prior to commercialization of any product.

Financing items

The following table summarizes interest income, interest expense, and other income and expense for the years ended December 31, 2017 and 2016 (in thousands):

	Years ended December 31,	
	2017	2016
Interest income	33	19
Interest expense	(2,049)	(2,592)
Other income, net	13	233
Total	$ (2,003)	$ (2,340)

- Interest expense decreased for the year ended December 31, 2017 as compared to 2016, due to principal payments made on our debt from January through August 2017.
- The changes in other income during the year ended December 31, 2017 as compared to 2016 resulted primarily from changes in exchange rates related to transactions in foreign currency.

The future: We expect interest expense in 2018 to decrease due to the decrease in the principal balance of the Loan and Security Agreement, dated May 29, 2015, or the Loan and Security Agreement, with Oxford Finance LLC, or Oxford.

Liquidity and Capital Resources

Short-term and long-term liquidity

The following is a summary of our key liquidity measures at December 31, 2017 and 2016 (in thousands):

	As of December 31,	
	2017	2016
Cash and cash equivalents	$ 9,550	$ 12,560
Current assets	$ 14,864	$ 18,747
Current liabilities	18,414	12,501
Working capital (deficit)	$ (3,550)	$ 6,246

We incurred net losses of $22.7 million and $22.0 million for the years ended December 31, 2017 and 2016, respectively. We have an accumulated deficit of $401.7 million as of December 31, 2017. Additionally, we have used net cash of $18.1 million and $19.5 million to fund our operating activities for the years ended December 31, 2017 and 2016, respectively.

Further, the Loan and Security Agreement, with Oxford Finance, LCC, or Oxford, as amended and further described in Note 8 to the consolidated financial statements, requires us to maintain a minimum of $1.5 million in unrestricted cash and cash equivalents on hand to avoid an event of default under the Loan and Security Agreement. Based on our cash and cash equivalents on hand of approximately $9.6 million at December 31, 2017, we estimate that we will need to raise additional capital and/or obtain a waiver or restructure the Loan and Security Agreement in the near term to avoid defaulting under our $1.5 million minimum cash/cash equivalents covenant.

On September 1, 2017, we announced a substantial corporate restructuring intended to significantly reduce expenses while maintaining its ability to execute on its BARDA-sponsored cell therapy program, Japanese business and oncology program. The restructuring reduced our workforce by approximately 50% and significantly reduced our operational cash burn.

To date, these operating losses have been funded primarily from outside sources of invested capital including our recently completed underwritten public offering, our Lincoln Park Purchase Agreement, or the Lincoln Park Purchase Agreement, with Lincoln Park Capital Fund, LLC, or Lincoln Park, and the 2016 and 2017 Rights Offerings (each defined below), our at-the-market, or ATM, equity facility, the Loan and Security Agreement and gross profits. We have had, and we will likely continue to have, an ongoing need to raise additional cash from outside sources to fund our future clinical development programs and other operations.

On November 28, 2017, we closed a rights offering originally filed under a Form S-1 registration statement in August 2017, or the 2017 Rights Offering. Pursuant to the 2017 Rights Offering, we sold an aggregate of 10,000 units consisting of a total of 10,000 shares of Series B Convertible Preferred Stock, immediately convertible into approximately 30,000,000 shares of common stock and 18,000,000 warrants, with each warrant exercisable for one share of common stock at an exercise price of $0.3333 per share, resulting

in total net proceeds to us of $8.8 million. These warrants only become exercisable upon approval of the increase in authorized shares by our stockholders.

During the year ended December 31, 2017, we sold 894,050 shares of our common stock under our ATM offering program, receiving total net proceeds of approximately $1.5 million. Although sales of our common stock have taken place pursuant to our ATM offering program, there can be no assurance that we will be successful in consummating future sales based on prevailing market conditions or in the quantities or at the prices that we deem appropriate. In addition, under current SEC regulations, at any time during which the aggregate market value of our common stock held by non-affiliates, or public float, is less than $75.0 million, the amount we can raise through primary public offerings of securities in any twelve-month period using shelf registration statements, including sales under our ATM offering program, is limited to an aggregate of one-third of our public float. As of December 31, 2017, our public float was 57.8 million shares, the value of which was $17.3 million based upon the closing price of our common stock of $0.30 on such date. The value of one-third of our public float calculated on the same basis was approximately $5.7 million.

On December 22, 2016, we entered into the Lincoln Park Purchase Agreement and a registration rights agreement with Lincoln Park pursuant to which we have the right to sell to Lincoln Park and Lincoln Park is obligated to purchase up to $20.0 million of shares of our common stock over the 30-month period following March 31, 2017. We may direct Lincoln Park, at our sole discretion and subject to certain conditions, to purchase up to 100,000 shares of common stock on any business day but in no event will the amount of a single Regular Purchase exceed $1.0 million. The purchase price of shares of common stock related to the Regular Purchases will be based on the prevailing market prices of such shares at the time of sales. Our sales of shares of common stock to Lincoln Park under the Lincoln Park Purchase Agreement are limited to no more than the number of shares that would result in the beneficial ownership by Lincoln Park and its affiliates, at any single point in time, of more than 9.99% of the then outstanding shares of the common stock. There are no trading volume requirements or restrictions under the Lincoln Park Purchase Agreement. There is no upper limit on the price per share that Lincoln Park must pay for common stock under a Regular Purchase or an accelerated purchase and in no event will shares be sold to Lincoln Park on a day our closing price is less than the floor price of $0.50 per share as set forth in the Lincoln Park Purchase Agreement. On December 22, 2016, we issued to Lincoln Park 127,419 shares of common stock as commitment shares in consideration for entering into the Lincoln Park Purchase Agreement. Through December 31, 2017, we sold a total of 1.9 million shares under the Lincoln Park Purchase Agreement, for proceeds of approximately $1.7 million. We will issue up to an additional 382,258 shares of common stock on a pro rata basis to Lincoln Park only as and when shares are sold under the Lincoln Park Purchase Agreement to Lincoln Park.

On April 11, 2017, we entered into an underwriting agreement, or the Underwriting Agreement, with Maxim Group LLC, or Maxim, relating to the issuance and sale of 8.6 million shares of our common stock, par value $0.001 per share. The price to the public in the offering was $1.10 per share. Maxim agreed to purchase the shares from us pursuant to the Underwriting Agreement at a price of $1.0395 per share. The net proceeds to us from the offering were approximately $8.7 million, after deducting underwriting discounts and commissions and offering expenses incurred by us. The offering closed on April 17, 2017. In addition, under the terms of the Underwriting Agreement, we granted Maxim a 45-day option to purchase up to 944,000 additional shares of common stock. On May 31, 2017, Maxim exercised its option and purchased 849,000 shares at $1.10 per share. The net proceeds to us were $0.8 million, after deducting underwriting costs and offering expenses incurred by us.

On June 15, 2016, we closed a rights offering originally filed under a Form S-1 registration statement in April 2016, or the 2016 Rights Offering. Pursuant to the 2016 Rights Offering, we sold an aggregate of 6,704,852 units consisting of a total of 6,704,852 shares of common stock and 3,352,306 warrants, with each warrant exercisable for one share of common stock at an exercise price of $3.06 per share, resulting in total net proceeds to us of $17.1 million.

Pursuant to these securities transactions and related equity issuances, as well as anticipated gross profits and potential outside sources of capital, we believe we have sufficient cash to fund operations through at least through the third quarter of 2018. We continue to seek additional capital through product revenues, strategic transactions, including extension opportunities under the awarded BARDA contract, and from other financing alternatives. However, there can be no assurance that we will be successful in securing additional resources when needed, on terms acceptable to us or at all. Therefore, there exists substantial doubt about our ability to continue as a going concern. In addition, if we are unable to raise additional cash, it will have a material adverse impact on operations and will cause us to default on our loan.

The accompanying consolidated financial statements have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to our ability to continue as a going concern.

The following summarizes our contractual obligations and other commitments at December 31, 2017, and the effect such obligations could have on our liquidity and cash flow in future periods (in thousands):

Contractual Obligations	Payments due by period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	More than 5 years
Long-term obligations	$ 12,980	$ 5,192	$ 7,788	$ —	$ —
Interest commitment on long-term obligations	2,413	1,119	1,294	—	—
Operating lease obligations	2,374	589	1,106	679	—
Minimum purchase obligation	4,020	1,074	2,946	—	—
Clinical research study obligations	644	644	—	—	—
Total	$ 22,431	$ 8,618	$ 13,134	$ 679	$ —

Cash (used in) provided by operating, investing and financing activities for the years ended December 31, 2017 and 2016 is summarized as follows (in thousands):

	Years Ended December 31,	
	2017	2016
Net cash used in operating activities	$ (18,128)	$ (19,533)
Net cash provided by (used in) investing activities	(1,708)	64
Net cash provided by financing activities	16,815	17,609
Effect of exchange rate changes on cash and cash equivalents	11	82
Net decrease in cash and cash equivalents	$ (3,010)	$ (1,778)

Operating activities

Net cash used in operating activities for the year ended December 31, 2017 was $18.1 million. Overall, our operational cash use decreased during the year ended December 31, 2017 as compared to 2016 due primarily to a decrease in losses from operations (when adjusted for non-cash items) of $1.7 million offset by a cash outlay of $0.3 million in working capital.

Investing activities

The increase in net cash used in investing activities for the year ended December 31, 2017, as compared to 2016, resulted primarily from cash outflows for payment for long-lived assets purchased as part of Azaya's acquisition of $1.2 million, purchase of fixed assets of $0.3 million and increase in restricted cash of $0.3 million.

Financing Activities

The net cash provided by financing activities for the year ended December 31, 2017 is primarily related to sales of common and preferred stocks of $21.5 million, net of costs from sale, through our Rights Offering, a confidentially marketed public offering, Lincoln Park Agreement and ATM program offset by cash used in principal payments on our debt of $4.7 million.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements (as defined by applicable regulations of the SEC) that are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Critical Accounting Policies and Significant Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the reported amounts of our assets, liabilities, revenues and expenses, and that affect our recognition and disclosure of contingent assets and liabilities.

While our estimates are based on assumptions we consider reasonable at the time they were made, our actual results may differ from our estimates, perhaps significantly. If results differ materially from our estimates, we will make adjustments to our financial statements prospectively as we become aware of the necessity for an adjustment.

We believe it is important for you to understand our most critical accounting policies. These are our policies that require us to make our most significant judgments and, as a result, could have the greatest impact on our future financial results.

Revenue Recognition

In accordance with the Securities and Exchange Commission's guidance, we recognize revenue from product sales when the following fundamental criteria are met: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) the price to the customer is fixed or determinable and (iv) collection of the resulting accounts receivable is reasonably assured. For customers that have not developed a sufficient payment history with us or for whom a letter of credit is not in place at the time of the transaction, we defer revenues until collectability is reasonably assured.

For all sales, we use a binding purchase order or a signed agreement as evidence of an arrangement. If the other revenue recognition criteria are met, revenue for these product sales is recognized upon delivery to the customer, as all risks and rewards of ownership have been substantively transferred to the customer at that point. For sales to customers who arrange for and manage the shipping process, we recognize revenue upon shipment from our facilities. Shipping and handling costs that are billed to our customers are classified as revenue. The customer's obligation to pay and the payment terms are set at the time of delivery and are not dependent on the subsequent use or resale of our products. For sales where all revenue recognition criteria are not met, revenue is deferred and related inventory remains on our books.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. Amounts collected on accounts receivable are included in net cash provided by operating activities in the consolidated statements of cash flows. We maintain an allowance for doubtful accounts for estimated losses inherent in our accounts receivable portfolio. In establishing the required allowance, management considers historical losses adjusted to take into account current market conditions and our customers' financial condition, the amount of receivables in dispute, and the current receivables aging and current payment patterns. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

Inventories

Inventories include the cost of material, labor, and overhead, and are stated at the lower of cost, determined on the first-in, first-out (FIFO) method, or net realizable value. We periodically evaluate our on-hand stock and make appropriate provisions for any stock deemed excess or obsolete. Manufacturing costs resulting from lower than "normal" production levels are expensed as incurred.

Impairment

We assess certain of our long-lived assets, such as property and equipment and intangible assets other than goodwill, for potential impairment when there is a change in circumstances that indicates carrying values of assets may not be recoverable. Such long-lived assets are deemed to be impaired when the undiscounted cash flows expected to be generated by the asset (or asset group) are less than the asset's carrying amount. Any required impairment loss would be measured as the amount by which the asset's carrying value exceeds its fair value, and would be recorded as a reduction in the carrying value of the related asset and a charge to operating expense.

Goodwill and Intangibles

Goodwill is reviewed for impairment annually or more frequently if indicators of impairment exist. We perform our impairment test annually during the fourth quarter. The impairment evaluation is performed assuming that we operate in a single operating segment and reporting unit. First we assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test. If, after assessing qualitative factors, we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. If deemed necessary, a two-step test is used to identify the potential impairment and to measure the amount of goodwill impairment, if any. The first step is to compare the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is considered not impaired; otherwise, there is an indication that goodwill may be impaired and the amount of the loss, if any, is measured by performing step two. Under step two, the impairment loss, if any, is measured by comparing the implied fair value of the reporting unit goodwill with the carrying amount of goodwill. There was no indication of impairment of goodwill for all periods presented, as our market capitalization throughout 2016 and 2017 was greater than our net asset position.

Separable intangible assets that have finite useful lives are amortized over their respective useful lives.

Share-based compensation

The estimated fair value of share-based awards exchanged for employee and non-employee director services are expensed over the requisite service period and over the period during which the employee and non-employee director is required to provide service in exchange for the award. For purposes of calculating stock-based compensation, we estimate the fair value of stock options and shares issued under the Employee Stock Purchase Plan using a Black-Scholes option-pricing model. The determination of the fair value of share-based payment awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. The expected volatility is based on the historical volatility of our common stock over the most recent period commensurate with the estimated expected term of the stock options. The expected life of the stock options is based on historical and other economic data trended into the future. The risk-free interest rate assumption is based on observed interest rates appropriate for the expected terms of our stock options. The dividend yield assumption is based on our history and expectation of no dividend payouts. The fair value of restricted stock agreements granted is based on the market price of our common stock on the day of the grant.

Recent Accounting Pronouncements

See Note 2 to the Consolidated Financial Statements included elsewhere herein for disclosure and discussion of new accounting standards.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 8. Financial Statements and Supplementary Data

PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Cytori Therapeutics, Inc.
San Diego, California

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Cytori Therapeutics, Inc. (the "Company") and subsidiaries as of December 31, 2017 and 2016 and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2017, and the related notes and financial statement schedule listed in the accompanying index (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 and subsidiaries at December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the 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 consolidated 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 consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO USA, LLP

We have served as the Company's auditor since 2016.

San Diego, California
March 9, 2018

CYTORI THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and par value data)

	As of December31,	
	2017	**2016**
Assets		
Current assets:		
Cash and cash equivalents	$ 9,550	$ 12,560
Accounts receivable, net of reserves of $167 in 2017 and 2016	145	1,242
Restricted cash	675	350
Inventories, net	3,183	3,725
Other current assets	1,311	870
Total current assets	14,864	18,747
Property and equipment, net	3,052	1,157
Other assets	2,570	2,336
Intangibles, net	7,207	8,447
Goodwill	3,922	3,922
Total assets	$ 31,615	$ 34,609
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	$ 4,790	$ 5,872
Current portion of long-term obligations, net of discount	13,624	6,629
Total current liabilities	18,414	12,501
Deferred revenues	94	97
Long-term deferred rent and other	107	17
Long-term obligations, net of discount, less current portion	—	11,008
Total liabilities	18,615	23,623
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; 23,500 shares issued; 2,431 shares outstanding in 2017 and no shares outstanding in 2016	—	—
Common stock, $0.001 par value; 75,000,000 shares authorized; 57,825,729 and 21,707,890 shares issued and outstanding in 2017 and 2016, respectively	58	22
Additional paid-in capital	413,304	388,769
Accumulated other comprehensive income	1,387	1,258
Accumulated deficit	(401,749)	(379,063)
Total stockholders' equity	13,000	10,986
Total liabilities and stockholders' equity	$ 31,615	$ 34,609

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	For the Years Ended December 31,	
	2017	2016
Product revenues	$ 2,689	$ 4,656
Cost of product revenues	1,318	2,170
Amortization of intangible assets	1,225	545
Gross profit	146	1,941
Development revenues:		
Government contracts and other	3,722	6,724
	3,722	6,724
Operating expenses:		
Research and development	11,678	16,197
Sales and marketing	3,593	3,611
General and administrative	7,594	8,563
In process research and development acquired from Azaya	1,686	—
Total operating expenses	24,551	28,371
Operating loss	(20,683)	(19,706)
Other income (expense):		
Interest income	33	19
Interest expense	(2,049)	(2,592)
Other income, net	13	233
Total other expense	(2,003)	(2,340)
Net loss	$ (22,686)	$ (22,046)
Beneficial conversion feature for convertible preferred stock	(3,977)	—
Net loss allocable to common stockholders	$ (26,663)	$ (22,046)
Basic and diluted net loss per share allocable to common stockholders	$ (0.82)	$ (1.28)
Basic and diluted weighted average shares used in calculating net loss per share allocable to common stockholders	32,389,831	17,290,933
Comprehensive loss:		
Net loss	$ (22,686)	$ (22,046)
Other comprehensive income – foreign currency translation adjustments	129	262
Comprehensive loss	$ (22,557)	$ (21,784)

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016
(in thousands, except share data)

	Convertible preferred stock		Common stock		Additional paid-in capital	Accumulated other comprehensive income	Accumulated deficit	Total stockholders' equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2015	—	—	13,003,893	$ 13	$ 368,214	$ 996	$ (357,017)	$ 12,206
Share-based compensation	—	—	—	—	1,080	—	—	1,080
Issuance of common stock under employee stock purchase plan	—	—	30,744	—	6	—	—	6
Sale of common stock, net	—	—	8,673,253	9	19,469	—	—	19,478
Foreign currency translation adjustment and accumulated other comprehensive income	—	—	—	—	—	262	—	262
Net loss	—	—	—	—	—		(22,046)	(22,046)
Balance at December 31, 2016	—	—	21,707,890	$ 22	$ 388,769	$ 1,258	$ (379,063)	$ 10,986
Share-based compensation	—	—	—	—	753	—	—	753
Issuance of common stock under employee stock purchase plan	—	—	1,200	—	1	—	—	1
Sale of common stock, net	—	—	12,237,079	12	12,704	—	—	12,716
Issuance of Series B Convertible Preferred Stock into common stock, net	10,000	—	—	—	8,767	—	—	8,767
Conversion of Series B Convertible Preferred Stock into common stock	(7,569)	—	22,706,319	23	—	—	—	23
Issuance of common stock as part of Azaya Therapeutics acquisition, net	—	—	1,173,241	1	2,310	—	—	2,311
Beneficial conversion feature related to Series B Convertible Preferred Stock	—	—	—	—	3,977	—	—	3,977
Accretion of beneficial conversion feature related to Series B Convertible Preferred Stock	—	—	—	—	(3,977)	—	—	(3,977)
Foreign currency translation adjustment and accumulated other comprehensive income	—	—	—	—	—	129	—	129
Net loss	—	—	—	—	—	—	(22,686)	(22,686)
Balance at December 31, 2017	2,431	—	57,825,729	$ 58	$ 413,304	$ 1,387	$ (401,749)	$ 13,000

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	For the Years Ended December 31,	
	2017	**2016**
Cash flows from operating activities:		
Net loss	$ (22,686)	$ (22,046)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,151	1,182
Amortization of deferred financing costs and debt discount	707	954
In process research and development acquired from Azaya Therapeutics	1,686	—
Joint venture acquisition obligation accretion	—	24
Provision for expired inventory	340	172
Share-based compensation expense	753	1,080
Gain on asset disposal	(42)	(127)
Increases (decreases) in cash caused by changes in operating assets and liabilities:		
Accounts receivable	1,129	(179)
Inventories	251	471
Other current assets	(593)	633
Other assets	(94)	(764)
Accounts payable and accrued expenses	(1,817)	(673)
Deferred revenues	(3)	(8)
Long-term deferred rent	90	(252)
Net cash used in operating activities	(18,128)	(19,533)
Cash flows from investing activities:		
Purchases of property and equipment	(295)	(67)
Proceeds from sale of assets	113	131
Purchase of long-lived assets as part of Azaya Therapeutics' acquisition	(1,201)	—
Change in restricted cash	(325)	—
Net cash (used in) provided by investing activities	(1,708)	64
Cash flows from financing activities:		
Principal payments on long-term obligations	(4,720)	—
Joint venture purchase payments	—	(1,774)
Proceeds from sale of common stock	23,613	21,467
Costs from sale of common stock	(2,078)	(2,084)
Net cash provided by financing activities	16,815	17,609
Effect of exchange rate changes on cash and cash equivalents	11	82
Net decrease in cash and cash equivalents	(3,010)	(1,778)
Cash and cash equivalents at beginning of period	12,560	14,338
Cash and cash equivalents at end of period	$ 9,550	$ 12,560
Supplemental disclosure of cash flows information:		
Cash paid during period for:		
Interest	$ 1,364	$ 1,618
Supplemental schedule of non-cash investing and financing activities:		
Issuance costs paid in common stock	$ —	$ 189
Conversion of preferred stock into common stock	$ 23	$ —
Fair value of Series B Convertible Preferred Stock beneficial conversion feature	$ 3,977	$ —
Common stock issued in payment for the assets acquired from Azaya Therapeutics	$ 2,311	$ —

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Operations

The Company

Cytori Therapeutics, Inc. (Nasdaq: CYTX) is a therapeutics company developing regenerative and oncologic therapies from its proprietary cell therapy and nanoparticle platforms for a variety of medical conditions. The Company's primary focus on bringing its lead nanoparticle product candidate, ATI-0918, to the European market and the development of its cell therapies for impaired hand function in scleroderma, in addition to our other pipeline areas, such as osteoarthritis of the knee, stress urinary incontinence, and full thickness thermal burns including those complicated by radiation exposure.

Principles of Consolidation

The accompanying consolidated financial statements include our accounts and those of our subsidiaries. All significant intercompany transactions and balances have been eliminated in consolidation.

The Company has five wholly-owned subsidiaries located in Japan, United Kingdom, Switzerland, India and Spain that have been established primarily to support our sales and marketing activities in these regions.

Reverse Stock Split

On May 10, 2016, following stockholder and Board approval, an amendment (the "Amendment") to the Company's amended and restated certificate of incorporation, as amended, was filed and declared effective, which Amendment effectuated a one-for-fifteen (1:15) reverse stock split of the Company's (i) outstanding common stock, and (ii) common stock reserved for issuance upon exercise of outstanding warrants and options (the "1:15 Reverse Stock Split"). Upon effectiveness of the 1:15 Reverse Stock Split, the number of shares of the Company's common stock (x) issued and outstanding decreased from approximately 200 million shares (as of May 10, 2016) to approximately 13.3 million shares; (y) reserved for issuance upon exercise of outstanding warrants and options decreased from approximately 16 million shares to approximately 1.1 million shares, and (z) reserved but unallocated under our current equity incentive plans (including the stockholder-approved share increase to the Company's 2014 Equity Incentive Plan) decreased from approximately 6.5 million common shares to approximately 0.4 million common shares. In connection with the 1:15 Reverse Stock Split, the Company also decreased the total number of its authorized shares of common stock from 290 million to 75 million. The number of authorized shares of preferred stock remained unchanged. Following the 1:15 Reverse Stock Split. The Company adjusted stockholders' equity to reflect the 1:15 Reverse Stock Split by reclassifying an amount equal to the par value of the shares eliminated by the split from common stock to the additional paid-in capital during the first quarter of fiscal 2016, resulting in no net impact to stockholders' equity on our consolidated balance sheets. The Company's shares of common stock commenced trading on a split-adjusted basis on May 12, 2016. Proportional adjustments for the reverse stock split were made to the Company's outstanding stock options, warrants and equity incentive plans for all periods presented.

Certain Risks and Uncertainties

Our prospects are subject to the risks and uncertainties frequently encountered by companies in the early stages of development and commercialization, especially those companies in rapidly evolving and technologically advanced industries such as the biotech/medical device field. Our future viability largely depends on our ability to complete development of new products and receive regulatory approvals for those products. No assurance can be given that our new products will be successfully developed, regulatory approvals will be granted, or acceptance of these products will be achieved. The development of medical devices for specific therapeutic applications is subject to a number of risks, including research, regulatory and marketing risks. There can be no assurance that our development stage products will overcome these hurdles and become commercially viable and/or gain commercial acceptance.

Liquidity and Going Concern

We incurred net losses of $22.7 million and $22.0 million for the years ended December 31, 2017 and 2016, respectively. We have an accumulated deficit of $401.7 million as of December 31, 2017. Additionally, we have used net cash of $18.1 million and $19.5 million to fund our operating activities for the years ended December 31, 2017 and 2016, respectively. The Company does not have sufficient capital to fund operations through one year from the issuance date of these consolidated financial statements. These factors raise substantial doubt about the Company's ability to continue as a going concern.

Further, the Loan and Security Agreement, with Oxford Finance, LCC ("Oxford"), as further described in Note 8, requires maintaining a minimum of $1.5 million in unrestricted cash and cash equivalents on hand to avoid an event of default under the Loan and Security Agreement. Based on our cash and cash equivalents on hand of approximately $9.6 million at December 31, 2017, the Company estimates that it will need to raise additional capital and/or obtain a waiver or restructure the Loan and Security Agreement in the near term to avoid defaulting under our $1.5 million minimum cash/cash equivalents covenant.

To date, these operating losses have been funded primarily from outside sources of invested capital including our recently completed underwritten public offering, Lincoln Park Purchase Agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park") and the 2016 and 2017 Rights Offerings (each defined below), our at-the-market ("ATM") equity facility, the Loan and Security Agreement and gross profits. We have had, and we will likely continue to have, an ongoing need to raise additional cash from outside sources to fund our future clinical development programs and other operations. Our inability to raise additional cash will have a material and adverse impact on operations and will cause us to default on our loan.

On June 15, 2016, we closed a rights offering originally filed under Form S-1 registration statement in April 2016. Pursuant to the 2016 Rights Offering (as defined below in Note 11), we sold an aggregate of 6,704,852 units consisting of a total of 6,704,852 shares of common stock and 3,352,306 warrants, with each warrant exercisable for one share of common stock at an exercise price of $3.06 per share, resulting in total gross proceeds to Cytori of $17.1 million. See Note 11 for further discussion on the 2016 Rights Offering.

On December 22, 2016, we entered into a purchase agreement and a registration rights agreement, with Lincoln Park pursuant to which we have the right to sell to Lincoln Park and Lincoln Park is obligated to purchase up to $20.0 million of shares of the Company's common stock over the 30-month period following March 31, 2017, subject to the satisfaction of certain conditions. See Note 11 for further discussion on the Lincoln Park agreement.

On April 11, 2017, we entered into an underwriting agreement (the "Underwriting Agreement") with Maxim Group LLC ("Maxim") relating to the issuance and sale of 8.6 million shares of our common stock, par value $0.001 per share. The price to the public in the offering was $1.10 per share. Maxim agreed to purchase the shares from us pursuant to the Underwriting Agreement at a price of $1.0395 per share. The net proceeds to us from the offering were approximately $8.7 million, after deducting underwriting discounts and commissions and offering expenses incurred by the Company. The offering closed on April 17, 2017. In addition, under the terms of the Underwriting Agreement, we granted Maxim a 45-day option to purchase up to 944,000 additional shares of common stock. On May 31, 2017, Maxim exercised its option and purchased 849,000 shares at $1.10 per share. The net proceeds to us were $0.8 million, after deducting underwriting costs and offering expenses incurred by us.

On September 5, 2017, we received a written notice from The Nasdaq Stock Market LLC ("Nasdaq") indicating that, based upon the closing bid price of our common stock for the last 30 consecutive business days, we no longer meet the requirement to maintain a minimum bid price of $1 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were provided a period of 180 calendar days, or until March 5, 2018, in which to regain compliance. We were granted an additional compliance period of 180 calendar days, or until September 4, 2018, in which to regain compliance after meeting the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the bid price requirement, and providing notice to Nasdaq of our intent to cure the deficiency during this second compliance period, by effecting a reverse stock split, if necessary. In order to regain compliance with the minimum bid price requirement, the closing bid price of our common stock must be at least $1 per share for a minimum of ten consecutive business days during this 180-day period.

On November 28, 2017, we closed a rights offering originally filed under a Form S-1 registration statement in August 2017 ("2017 Rights Offering"). Pursuant to the 2017 Rights Offering, the Company sold an aggregate of 10,000 units consisting of a total of 10,000 shares of Series B Convertible Preferred Stock, immediately convertible into approximately 30,000,000 shares of common stock and 18,000,000 warrants, with each warrant exercisable for one share of common stock at an exercise price of $0.3333 per share, resulting in total net proceeds to the Company of $8.8 million. These warrants only become exercisable upon stockholder approval.

We continue to seek additional capital through product revenues, strategic transactions, including extension opportunities under our awarded U.S. Department of Health and Human Service's Biomedical Advanced Research and Development Authority ("BARDA") contract, and from other financing alternatives. Without additional capital, current working capital and cash generated from sales will not provide adequate funding for research, sales and marketing efforts and product development activities at their current levels. If sufficient capital is not raised, we will at a minimum need to significantly reduce or curtail our research and development and other operations, and this could negatively affect our ability to achieve corporate growth goals.

Should we be unable to raise additional cash from outside sources, this will have a material adverse impact on our operations.

The accompanying consolidated financial statements have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to its ability to continue as a going concern.

Reclassifications

Certain immaterial reclassifications have been made to certain of the prior years' consolidated financial statements to conform to the current year presentation.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions affecting the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Our most significant estimates and critical accounting policies involve recognizing revenue, reviewing goodwill and intangible assets for impairment, determining the assumptions used in measuring share-based compensation expense, measuring expense related to our in-process research and development acquisition, and valuing allowances for doubtful accounts and inventory reserves.

Actual results could differ from these estimates. Management's estimates and assumptions are reviewed regularly, and the effects of revisions are reflected in the consolidated financial statements in the periods they are determined to be necessary.

Cash and cash equivalents

We consider all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents.

Cash and cash equivalents includes cash in readily available checking and savings accounts. We held no investments as of December 31, 2017 and 2016. We maintain our cash at insured financial institutions.

Restricted Cash

Restricted cash consists of cash invested in certificate of deposits used as collateral for the issuance of letters of credit pursuant to lease agreements for leasing of property at 3020 and 3030 Callan Road, San Diego, CA, which requires us to execute a letter of credit for $0.2 million naming the landlord as a beneficiary as of December 31, 2017. In addition, in connection with the new lease (see Note 7) we executed in 2017, we issued a letter of credit in favor of that landlord in the amount of $0.5 million, which will remain in effect for the term of the lease.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company periodically assesses the collectability of accounts receivable on a specific customer basis considering factors such as evaluation of collectability, historical collection experience, the age of accounts receivable and other currently available evidence of the collectability, and records an allowance for doubtful accounts for the estimated uncollectible amount. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

Inventories

Inventories include the cost of material, labor, and overhead related to Celution devices, consumable kits, and reagents, and are stated at the lower of cost, determined on the first-in, first-out (FIFO) method, or net realizable value. We periodically evaluate our on-hand stock and make appropriate provisions for any stock deemed excess or obsolete. Manufacturing costs resulting from lower than "normal" production levels are expensed as incurred.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation expense, which includes the amortization of capitalized leasehold improvements, is provided for on a straight-line basis over the estimated useful lives of the assets, or the life of the lease, whichever is shorter, and range from three to five years. When assets are sold or otherwise

disposed of, the cost and related accumulated depreciation are removed from the accounts and the resulting gain or loss, if any, is included in operations. Maintenance and repairs are charged to operations as incurred.

Impairment

We assess certain of our long-lived assets, such as property and equipment and intangible assets other than goodwill, for potential impairment when there is a change in circumstances that indicates carrying values of assets may not be recoverable. Such long-lived assets are deemed to be impaired when the undiscounted cash flows expected to be generated by the asset (or asset group) are less than the asset's carrying amount. Any required impairment loss would be measured as the amount by which the asset's carrying value exceeds its fair value, and would be recorded as a reduction in the carrying value of the related asset and a charge to operating expense. We recognized no impairment losses during any of the periods presented in these financial statements.

Goodwill and Intangibles

Goodwill is reviewed for impairment annually or more frequently if indicators of impairment exist. We perform our impairment test annually during the fourth quarter. As the Company operates in a single operating segment and reporting unit, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test. If, after assessing qualitative factors, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. If deemed necessary, a two-step test is used to identify the potential impairment and to measure the amount of goodwill impairment, if any. The first step is to compare the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is considered not impaired; otherwise, there is an indication that goodwill may be impaired and the amount of the loss, if any, is measured by performing step two. Under step two, the impairment loss, if any, is measured by comparing the implied fair value of the reporting unit goodwill with the carrying amount of goodwill. There was no indication of impairment of goodwill for all periods presented.

Separable intangible assets that have finite useful lives are amortized over their respective useful lives.

As part of the May 2013 acquisition of the Joint Venture (see Note 3), we acquired intangible assets which consisted primarily of contractual license rights that had previously enabled the Joint Venture to conduct development and manufacturing activities pertaining to certain aspects of Cytori's Celution technology. The useful life of the identifiable intangible assets was estimated based on the assumed future economic benefit expected to be received from the assets. The technology was valued at $9.4 million and is being amortized on a straight-line basis over a useful life of eleven years, commensurate with the expected cash flows. The amortization expense was $1.2 million and $0.6 million for the years ended December 31, 2017 and 2016, respectively. The estimated aggregate amortization expense will be $1.2 million per year from for 2018 through 2022, and $0.9 million thereafter. Accumulated amortization on the intangible assets was $4.7 million as of December 31, 2017 and $3.4 million as of December 31, 2016.

The changes in the carrying amounts of finite-life intangible assets and goodwill for the years ended December 31, 2017 and 2016 are as follows (in thousands):

	December 31, 2017	December 31, 2016
Intangibles, net:		
Beginning balance	$ 8,447	$ 9,031
Increase	—	—
Amortization	(1,240)	(584)
Ending balance	7,207	8,447
Goodwill, net:		
Beginning balance	3,922	3,922
Increase (decrease)	—	—
Ending balance	3,922	3,922
Total goodwill and other intangibles, net	$ 11,129	$ 12,369

Revenue Recognition

Product Sales

We recognize revenue from product sales when the following fundamental criteria are met: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) the price to the customer is fixed or determinable and (iv) collection of the resulting accounts receivable is reasonably assured. We evaluate customers that have not developed a sufficient payment history with us or for whom a letter of credit is not in place at the time of the transaction and defer revenues until collectability is reasonably assured.

For all sales, we use a binding purchase order or a signed agreement as evidence of an arrangement. If the other revenue recognition criteria are met, revenue for these product sales is recognized upon delivery to the customer as all risks and rewards of ownership have been substantively transferred to the customer at that point. For sales to customers who arrange for and manage the shipping process, we recognize revenue upon shipment from our facilities. Shipping and handling costs that are billed to our customers are classified as revenue. The customer's obligation to pay and the payment terms are set at the time of delivery and are not dependent on the subsequent use or resale of our products. For sales where all revenue recognition criteria are not met, revenue is deferred and related inventory remains on our books.

Concentration of Significant Customers & Geographical Sales

For the year ended December 31, 2017, our sales were concentrated with respect to five direct customers, which comprised 68% of our product revenue recognized. One licensee and one direct customer accounted for 77% of total outstanding accounts receivable (excluding receivables from BARDA) as of December 31, 2017.

For the year ended December 31, 2016, our sales were concentrated with respect to two distributors and three direct customers, which comprised 65% of our product revenue recognized. Two direct customers accounted for 57% of total outstanding accounts receivable (excluding receivables from BARDA) as of December 31, 2016.

Product revenues, classified by geographic location, are as follows (in thousands):

	Years ended December 31,			
	2017		2016	
	Product Revenues	% of Total	Product Revenues	% of Total
Americas	$ 345	13%	$ 936	20%
Japan	1,924	71%	3,279	71%
EMEA	344	13%	379	8%
Asia Pacific	76	3%	62	1%
Total product revenues	$ 2,689	100%	$ 4,656	100%

Development Revenues

We earn revenue for performing tasks under research and development agreements with governmental agencies like BARDA. Revenues derived from reimbursement of direct out-of-pocket expenses for research costs associated with government contracts are recorded as government contract and other within development revenues. Government contract revenue is recorded at the gross amount of the reimbursement. The costs associated with these reimbursements are reflected as a component of research and development expense in our statements of operations. We recognized $3.7 million and $6.7 million in BARDA revenue for the years ended December 31, 2017 and 2016, respectively.

Research and Development

Research and development expenditures, which are charged to operations in the period incurred, include costs associated with the design, development, testing and enhancement of our products, regulatory fees, the purchase of laboratory supplies, and pre-clinical and clinical studies as well as salaries and benefits for our research and development employees.

Also included in research and development expenditures are costs incurred to support the government reimbursement contract, including $3.5 million and $6.3 million of qualified expenses that were incurred for the years ended December 31, 2017 and 2016, related to our government contract with BARDA.

Deferred Financing Costs and Other Debt-Related Costs

Deferred financing costs are capitalized, recorded as an offset to debt balances and amortized to interest expense over the term of the associated debt instrument using the effective interest method. If the maturity of the debt is accelerated because of default or early debt repayment, then the amortization would be accelerated.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income (loss) in the years in which those temporary differences are expected to be recovered or settled. Due to our history of losses, a full valuation allowance has been recognized against our deferred tax assets.

The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense. For the years ended December 31, 2017 and 2016, the Company has not recorded any interest or penalties related to income tax matters. The Company does not foresee any material changes to unrecognized tax benefits within the next twelve months.

Share-Based Compensation

We recognize the fair value of all share-based payment awards in our statements of operations over the requisite vesting period of each award, which approximates the period during which the employee and non-employee director is required to provide service in exchange for the award. We estimate the fair value of these options using the Black-Scholes option pricing model using assumptions for expected volatility, expected term, and risk-free interest rate. Expected volatility is based primarily on historical volatility and is computed using daily pricing observations for recent periods that correspond to the expected term of the options. The expected term is calculated based on historical data for and applied to all employee awards as a single group as we do not expect (nor does historical data suggest) substantially different exercise or post-vesting termination behavior amongst our employee population. The risk-free interest rate is the interest rate for treasury instruments with maturities that approximate the expected term.

Segment Information

For the years ended December 31, 2017 and 2016, the Company is managed as a single operating segment, therefore we report our results in one operating segment.

Loss Per Share

Basic per share data is computed by dividing net income or loss applicable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted per share data is computed by dividing net income or loss applicable to common stockholders by the weighted average number of common shares outstanding during the period increased to include, if dilutive, the number of additional common shares that would have been outstanding as calculated using the treasury stock method. Potential common shares were related entirely to outstanding but unexercised options and warrants for all periods presented.

We have excluded all potentially dilutive securities, including unvested performance-based restricted stock, from the calculation of diluted loss per share attributable to common stockholders for the years ended December 31, 2017 and 2016, as their inclusion would be antidilutive. Potentially dilutive securities excluded from the calculations of diluted loss per share were 20.5 million as of December 31, 2017, which includes 19.5 million outstanding warrants and 1.0 million options and restricted stock awards. Potentially dilutive securities excluded from the calculations of diluted loss per share were 4.2 million as of December 31, 2016.

Recently Issued and Recently Adopted Accounting Pronouncements

Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606). The new standard is based on the principle that revenue should be recognized in an amount that reflects the consideration to which the entity expects to be entitled in exchange for the transfer of promised goods or services. ASU 2014-09 and all subsequent amendments (collectively, the "new standards") may be applied using either the full retrospective method, in which case the standard would be applied to each prior reporting period presented, or the modified retrospective method, in which case

the cumulative effect of applying the standard would be recognized at the date of initial application. We will adopt the standards beginning the first quarter of 2018 using the modified retrospective method. We have completed our assessment of the new standard and are evaluating the impact of the new required disclosures. Overall, we do not expect the timing or amounts related to the revenue recognition under the new standards to be materially different from our current revenue recognition policy. Our product revenues are recognized at a point in time, which is when we control transfers to the customer. We will make accounting policy elections to 1) treat shipping and handling activities that occur after the customer obtains control of the goods as fulfillment costs and 2) exclude sales (and similar) taxes from the measurement of the transaction price. Because we have no open contracts as of December 31, 2017, there will be no cumulative effect of applying the new standards.

In February 2016, the FASB issued ASU 2016-02, *Leases*. Under this new guidance, at the commencement date, lessees will be required to recognize (i) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis and (ii) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. This guidance is not applicable for leases with a term of 12 months or less. The new standard is effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the impact that this standard will have on our consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of certain cash receipts and cash payments*, which addresses the following eight specific cash flow issues: debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance policies (including bank-owned life insurance policies); distributions received from equity method investees; beneficial interests in securitization transactions; and separately identifiable cash flows and application of the predominance principle. The new standard is effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2017, with early adoption permitted. We do not anticipate that the adoption of ASU 2016-15 will have a material impact on our consolidated financial statements.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, *Restricted Cash*, which requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. The amendments in this update should be applied using a retrospective transition method to each period presented. This update is effective for annual periods beginning after December 15, 2017, and interim periods within those fiscal years with early adoption permitted, including adoption in an interim period. The adoption of this standard will change the presentation of our statement of cash flows to include our restricted cash balance with the non-restricted cash balances. We do not anticipate that the adoption of ASU 2016-18 will have a material impact on our consolidated financial statements.

In February 2017, the FASB issued ASU 2017-04, *Simplifying the Test for Goodwill Impairment*, to simplify how all entities assess goodwill for impairment by eliminating Step 2 from the goodwill impairment test. As amended, the goodwill impairment test will consist of one step comparing the fair value of a reporting unit with its carrying amount. An entity should recognize a goodwill impairment charge for the amount by which the reporting unit's carrying amount exceeds its fair value. This update is effective for annual periods beginning after December 15, 2019, and interim periods within those periods. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We are currently evaluating the impact that this standard will have on our consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation*, to provide clarity and reduce both 1) diversity in practice and 2) cost and complexity when applying the guidance in Topic 718 to a change in the terms or conditions of a share-based payment award. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting under Topic 718. The amendments in ASU 2017-09 are effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period. The amendments in ASU 2017-09 should be applied prospectively to an award modified on or after the adoption date. We do not anticipate that the adoption of ASU 2017-09 will have a material impact on our consolidated financial statements.

Recently Adopted Accounting Pronouncements

In July 2015, FASB issued ASU 2015-11, *Simplifying the Measurement of Inventory*. This update applies to companies that measure inventory on a first in, first out, or FIFO, or average cost basis. Under this update, companies are to measure their inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion. The amendments in this update are effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2016 with earlier application permitted as of

the beginning of an interim or annual reporting period. The adoption, effective January 1, 2017, did not have a material impact on our consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which involves several aspects of the accounting for stock-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This new guidance will require all income tax effects of awards to be recognized as income tax expense or benefit in the income statement when the awards vest or are settled, as opposed to additional paid-in-capital where it is currently recorded. It also will allow an employer to repurchase more of an employee's shares than it can today for tax withholding purposes without triggering liability accounting. All tax-related cash flows resulting from stock-based payments are to be reported as operating activities on the statement of cash flows. The guidance also allows a Company to make a policy election to either estimate the number of awards that are expected to vest or account for forfeitures as they occur. This new standard is effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2016, with early adoption permitted. We have elected to keep our policy consistent for the application of a forfeiture rate and, as such, the adoption of this standard did not have a material impact on our consolidated financial statements.

In January 2017, the FASB issued Accounting Standards Update No. 2017-01, *Clarifying the Definition of a Business*, which clarifies and provides a more robust framework to use in determining when a set of assets and activities is a business. The amendments in this update should be applied prospectively on or after the effective date. This update is effective for annual periods beginning after December 15, 2017, and interim periods within those periods. Early adoption is permitted for acquisition or deconsolidation transactions occurring before the issuance date or effective date and only when the transactions have not been reported in issued or made available for issuance financial statements. We elected to early adopt the new guidance effective January 1, 2017 and this guidance was used in our assessment of the Azaya Therapeutics asset purchase agreement entered into in February 2017.

3. Transactions with Olympus Corporation

Under our Joint Venture Termination Agreement ("Termination Agreement"), dated May 8, 2013, with Olympus Corporation ("Olympus"), we were required to pay Olympus a total purchase price of $6.0 million within two years of the date of the Termination Agreement. Pursuant to amendments to the Termination Agreement, dated April 30, 2015 and January 8, 2016, the Company's repayment obligations were extended through May 8, 2016. We made payments under the Termination Agreement totaling approximately $4.2 million through December 31, 2015, as well as separate payments of $0.5 million each in January 2016 and April 2016, and paid the remaining balance of $0.8 million before the May 8, 2016 due date. There were no outstanding obligations to Olympus as of December 31, 2017.

4. Fair Value

Measurements

Fair value measurements are market-based measurements, not entity-specific measurements. Therefore, fair value measurements are determined based on the assumptions that market participants would use in pricing the asset or liability. We follow a three-level hierarchy to prioritize the inputs used in the valuation techniques to derive fair values. The basis for fair value measurements for each level within the hierarchy is described below:

- Level 1: Quoted prices in active markets for identical assets or liabilities.
- Level 2: Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable in active markets.
- Level 3: Valuations derived from valuation techniques in which one or more significant inputs are unobservable in active markets.

As of December 31, 2017 and 2016, we did not have any assets or liabilities measured at fair value presented on our balance sheets.

Financial Instruments

We disclose fair value information about all financial instruments, whether or not recognized in the balance sheets, for which it is practicable to estimate fair value. The disclosures of estimated fair value of financial instruments at December 31, 2017 and 2016, were determined using available market information and appropriate valuation methods. Considerable judgment is necessary to interpret market data and develop estimated fair value. The use of different market assumptions or estimation methods may have a material effect on the estimated fair value amounts.

The carrying amounts for cash and cash equivalents, accounts receivable, other current assets, accounts payable, accrued expenses and other liabilities approximate fair value due to the short-term nature of these instruments. Further, based on the borrowing rates currently available for loans with similar terms, we believe the fair value of long-term debt approximates its carrying value.

At December 31, 2017 and 2016, the aggregate fair value and the carrying value of the Company's long-term debt were as follows (in thousands):

	December 31, 2017		December 31, 2016	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Debt	$ 13,427	$ 13,624	$ 17,611	$ 17,637

Carrying value is net of debt discount of $0.4 million and $1.2 million as of December 31, 2017 and 2016, respectively.

The fair value of debt is classified as Level 3 in the fair value hierarchy as some of the inputs, primarily the effective interest rate, to our valuation model are either not observable quoted prices or are not derived principally from or corroborated by observable market data by correlation or other means.

Nonfinancial Assets and Liabilities

We apply fair value techniques on a non-recurring basis associated with: (1) valuing potential impairment losses related to goodwill which are accounted for pursuant to the authoritative guidance for intangibles—goodwill and other; and (2) valuing potential impairment losses related to long-lived assets which are accounted for pursuant to the authoritative guidance for property, plant and equipment.

5. Asset Purchase Agreement with Azaya Therapeutics

On February 15, 2017 (the "Closing Date"), we completed the acquisition from Azaya Therapeutics, Inc. ("Azaya") of certain tangible assets which consisted of a research lab, equipment and leasehold improvements and the assumption of certain of liabilities of Azaya, pursuant to an Asset Purchase Agreement (the "Agreement"). The book value of the tangible assets acquired was approximately $3.0 million at the acquisition date. The assets acquired are located in a facility rented in San Antonio, TX, by Cytori. In addition, pursuant to the Agreement, we acquired intangible assets comprised of two drug candidates in process research and development (IPR&D) stage (i) ATI-0918, a generic bioequivalent formulation of Doxil®/Caelix®, a chemotherapy drug that is a liposomal formulation of doxorubicin; and (ii) ATI-1123, a chemotherapy drug that is a liposomal formulation of docetaxel.

At the closing of the acquisition, we (i) issued 1,173,241 of shares of our common stock in Azaya's name, (A) 879,931 of which were delivered to Azaya promptly after the Closing, and (B) 293,310 of which were deposited into a 15-month escrow pursuant to a standard escrow agreement; and (ii) assumed the obligation to pay approximately $1.8 million of Azaya's existing payables, all of which were paid prior December 31, 2017. At the Closing Date, Azaya had no employees and therefore no Azaya employees were transitioned to us.

In addition, as of the Closing Date, the Company committed to certain contingent consideration to: (i) pay Azaya fixed commercialization milestone payments based upon achievement of certain net sales milestones for ATI-0918; (ii) make certain earn-out payments to Azaya equal to a mid-single-digit percentage of net sales of ATI-0918; and (iii) make certain earn-out payments to Azaya equal to a low single-digit percentage of net sales of any product (ATI-0918 is the "Generic Product" and ATI-1123 is the "Patented Product"), including ATI-1123, that practices a claim in the related patent assigned by Azaya to the Company (the "ATI-1123 Patent"). Our aggregate earn-out payment obligations to Azaya from global net sales of both ATI-0918 and any Patented Product will not exceed $100.0 million (the "Earn-Out Cap").

Further, the Agreement provides that if we enter into certain assignments, licenses or other transfers of rights to a Patented Product or the ATI-1123 Patent, we will pay Azaya a percentage in the low to mid-teens of the consideration received by us, provided, that our aggregate payment obligation to Azaya for any such assignment, license or other transfer of rights will not exceed $50.0 million.

If the Company or its successors, sublicenses or transferees sells a competing product to ATI-0918 at any time prior to satisfaction of the Earn-Out Cap, other than because ATI-0918 fails to receive marketing authorization from the European Medicines Agency within a certain period of time or fails to generate a minimum threshold of net sales within a pre-determined amount of time, then 50% of the net sales of such competing product would be deemed to be net sales of ATI-0918 under the Agreement for purposes of calculating commercialization milestone payments and earn-out payments.

We accounted for the acquisition as an asset acquisition because the acquired set of assets did not meet the definition of a business. The total consideration of $4.3 million, which consists of $2.3 million related to the fair value of the common stock issued to Azaya at the acquisition date, $1.8 million in assumed liabilities and $0.2 million in acquisition costs, was allocated to the assets acquired based on their relative fair values at the time of acquisition. All other future payments were deemed contingent consideration which will be accounted for when the contingency is resolved and the consideration is paid or becomes payable.

When determining the fair value of tangible assets acquired, the Company estimated the cost to replace the tangible asset with a new asset, taking into consideration such factors as age, condition and the economic useful life of the asset. When determining the fair value of intangible assets acquired, the Company used a discounted cash flow model with key inputs being the applicable discount rate, market growth rates and the timing and amount of future cash flows. The acquired IPR&D is in the early stage of development. Additional research, pre-clinical studies, and regulatory approvals must be successfully completed prior to selling any product. Because there is no current alternative use for the IPR&D, following the authoritative accounting guidance, the Company has expensed it in full on the Closing Date. The Company measured the fair value of the shares issued as consideration in the acquisition of the assets based on the stock price at the acquisition date. Transaction costs directly related to the acquisition of the assets have been capitalized. The total consideration was allocated on a relative fair value basis to the assets acquired, as follows (in thousands):

	February 15, 2017
Tangible assets	$ 2,586
Intangible assets	1,686
Total assets	$ 4,272
Accounts payable	$ 1,796
Fair value of the common stock issued	2,311
Transaction costs	165
Total consideration	$ 4,272

6. Composition of Certain Financial Statement Captions

Inventories, net

As of December 31, 2017 and 2016, inventories, net, were comprised of the following (in thousands):

	December 31,	
	2017	2016
Raw materials	$ 681	$ 885
Work in process	722	1,021
Finished goods	1,780	1,819
	$ 3,183	$ 3,725

Other Current Assets

As of December 31, 2017 and 2016, other current assets were comprised of the following (in thousands):

	December 31,	
	2017	2016
Prepaid supplies or services, current	$ 544	$ 734
Prepaid insurance	556	83
Prepaid consumption tax in Japan	99	2
Other receivables	112	51
	$ 1,311	$ 870

Property and Equipment, net

As of December 31, 2017 and 2016, property and equipment, net, were comprised of the following (in thousands):

	December 31,	
	2017	2016
Manufacturing and development equipment	$ 4,507	$ 4,256
Office and computer equipment	1,805	1,953
Leasehold improvements	5,087	3,399
	11,399	9,608
Less accumulated depreciation	(8,347)	(8,451)
	$ 3,052	$ 1,157

Depreciation expense totaled $0.9 million and $0.7 million for the years ended December 31, 2017 and 2016, respectively.

Other Assets

As of December 31, 2017 and 2016, other assets were comprised of the following (in thousands):

	December 31,	
	2017	2016
Prepaid supplies, long-term	$ 2,181	$ 1,838
Deposits	389	498
	$ 2,570	$ 2,336

Accounts Payable and Accrued Expenses

As of December 31, 2017 and 2016, accounts payable and accrued expenses were comprised of the following (in thousands):

	December 31,	
	2017	2016
Accrued expenses	$ 1,599	$ 1,752
Accounts payable	1,297	1,332
Accrued payroll and bonus	810	989
Accrued legal fees	509	614
Accrued vacation	64	502
Accrued R&D studies	286	347
Other current liabilities	225	336
	$ 4,790	$ 5,872

7. Commitments and Contingencies

We have entered into agreements with various research organizations for pre-clinical and clinical development studies, which have provisions for cancellation. Under the terms of these agreements, the vendors provide a variety of services including conducting research, recruiting and enrolling patients, monitoring studies and data analysis. Payments under these agreements typically include fees for services and reimbursement of expenses. The timing of payments due under these agreements is estimated based on current study progress. As of December 31, 2017, we have clinical research study obligations of $0.6 million, all of which are expected to be complete within a year. Should the timing of the clinical trials change, the timing of the payment of these obligations would also change.

We lease facilities for our headquarters office location as well as international office locations. As of December 31, 2017, we have contractual lease obligations to make payments on leases of office and manufacturing space as follows:

Years Ending December 31,	Obligation
2018	$ 589
2019	565
2020	541
2021	541
2022	138
Total	$ 2,374

Rent expense, which includes common area maintenance, for the years ended December 31, 2017 and 2016 was $2.2 million and $2.5 million, respectively.

On February 27, 2017, we entered into a Lease Agreement of office space for our corporate headquarters in San Diego, California (the "Lease"). The initial term of the Lease is 63 months and may be extended upon mutual agreement. The commencement date was originally expected to take place in November 2017 and subsequently amended to January 1, 2018. In connection with our restructuring announced in September 2017, we began negotiations with the landlord and in February 2018, announced a buy-out of our obligations with the Lease of approximately $0.6 million.

On January 27, 2017, we entered into a Lease Agreement of office space for our office in Tokyo, Japan (the "Japan Lease"). The initial term of the Japan Lease is 61 months, and may be extended upon mutual agreement. The Lease commenced on April 15, 2017.

We are party to an agreement with Roche Diagnostics Corporation, our sole supplier of reagents, which requires us to make certain product purchase minimums until 2020. Pursuant to the agreement, as of December 31, 2017, we have a minimum purchase obligation as follows:

Years Ending December 31,	Obligation
2018	$ 1,074
2019	1,473
2020	1,473
Total	$ 4,020

We are subject to various claims and contingencies related to legal proceedings. Due to their nature, such legal proceedings involve inherent uncertainties including, but not limited to, court rulings, negotiations between affected parties and governmental actions. Management assesses the probability of loss for such contingencies and accrues a liability and/or discloses the relevant circumstances, as appropriate. Management believes that any liability to us that may arise as a result of currently pending legal proceedings will not have a material adverse effect on our financial condition, liquidity, or results of operations as a whole.

8. Long-term Obligations

On May 29, 2015, we entered into the Loan and Security Agreement, (the "Loan and Security Agreement"), with Oxford, pursuant to which Oxford funded an aggregate principal amount of $17.7 million ("Term Loan"), subject to the terms and conditions set forth in the Loan and Security Agreement. The Term Loan accrues interest at a floating rate of at least 8.95% per annum, comprised of three-month LIBOR rate with a floor of 1.00% plus 7.95%. Pursuant to the Loan and Security Agreement, we were previously required to make interest only payments through June 1, 2016 and thereafter we were required to make payments of principal and accrued interest in equal monthly installments sufficient to amortize the Term Loan through June 1, 2019, the maturity date. On February 23, 2016, we received an acknowledgement and agreement from Oxford related to the positive data on our U.S. ACT-OA clinical trial. As a result, pursuant to the Loan and Security Agreement, the period for which we are required to make interest-only payments was extended from July 1, 2016 to January 1, 2017. All unpaid principal and interest with respect to the Term Loan is due and payable in full on June 1, 2019. At maturity of the Term Loan, or earlier repayment in full following voluntary prepayment or upon acceleration, we are required to make a final payment in an aggregate amount equal to approximately $1.1 million. In connection with the Term Loan, on May 29, 2015, we issued to Oxford warrants to purchase an aggregate of 94,441 shares of our common stock at an exercise price of $10.35 per share. These warrants became exercisable as of November 30, 2015 and will expire on May 29, 2025 and, following the authoritative accounting guidance, are equity classified and its respective fair value was recorded as a discount to the debt.

On September 20, 2017, we entered into an amendment to the Term Loan, pursuant to which, among other things, Oxford and the Lenders agreed to reduce the minimum liquidity covenant level originally at $5 million to $1.5 million. The amendment also extended the interest-only period under the Loan Agreement through August 1, 2018, as the Company successfully closed on a financing and received unrestricted net cash proceeds in excess of $5 million before December 29, 2017.

The Term Loan, as amended, is collateralized by a security interest in substantially all of the Company's existing and subsequently acquired assets, including its intellectual property assets, subject to certain exceptions set forth in the Loan and Security Agreement, as amended. The intellectual property asset collateral will be released upon the Company achieving certain liquidity level when the total principal outstanding under the Loan Agreement is less than $3 million. As of December 31, 2017, we were in compliance with all of the debt covenants under the Loan and Security Agreement.

The Term Loan Agreement contains customary indemnification obligations and customary events of default, including, among other things, our failure to fulfill certain obligations under the Term Loan, as amended, and the occurrence of a material adverse change, which is defined as a material adverse change in our business, operations, or condition (financial or otherwise), a material impairment of the prospect of repayment of any portion of the loan. In the event of default by us or a declaration of material adverse change by our lender, under the Term Loan, the lender would be entitled to exercise its remedies thereunder, including the right to accelerate the debt, upon which we may be required to repay all amounts then outstanding under the Term Loan, which could materially harm our financial condition. As of December 31, 2017, we were in compliance with all covenants under the Term Loan and have not received any notification or indication from the Lenders to invoke the material adverse change clause. However, due to our current cash flow position and the substantial doubt about our ability to continue as a going concern, the entire principal amount of the Term Loan has been reclassified to short-term. We will continue to evaluate the debt classification on a quarterly basis and evaluate for reclassification in the future should our financial condition improve.

Additional details relating to the outstanding Term Loan as of December 31, 2017 and 2016 are presented in the following table (in thousands):

Year ended December 31, 2017

Origination Date	Original Loan Amount	Interest Rate**	Current Monthly Payment***	Original Term	Remaining Principal (Face Value)
May 2015	$ 17,700	8.95%	$ 100	48 Months	$ 12,980

Year ended December 31, 2016

Origination Date	Original Loan Amount	Interest Rate**	Current Monthly Payment*	Original Term	Remaining Principal (Face Value)
May 2015	$ 17,700	8.95%	$ 136	48 Months	$ 17,700

* *Monthly payment as of December 2016, which reflects interest only*

** *3 month LIBOR rate with a floor of 1% plus 7.95%*

*** *Monthly payment as of December 2017, which reflects interest only*

As of December 31, 2017, the future contractual principal and final fee payments on all of our debt and capital lease obligations are as follows (as thousands):

Years Ending December 31,	
2018	$ 5,192
2019	8,877
Total	$ 14,069

Reconciliation of Face Value to Book Value as of December 31, 2017	
Total debt and lease obligations, including final payment fee (Face Value)	$ 14,069
Less: Debt discount	(445)
Total obligation	$ 13,624

Our interest expense for the years ended December 31, 2017 and 2016 was $2.0 million and $2.6 million, respectively. Interest expense is calculated using the effective interest method, therefore it is inclusive of non-cash amortization in the amount of $0.7 million and $1.0 million, respectively, related to the amortization of the debt discount, capitalized loan costs, and accretion of final payment.

9. Income Taxes

Due to our net losses for the years ended December 31, 2017 and 2016, and since we have recorded a full valuation allowance against deferred tax assets, there was no provision or benefit for income taxes recorded.

The components of income/(loss) before income tax provision (benefit) as of December 31, 2017 and 2016 are as follows (in thousands):

	2017	2016
U.S.	$ (21,915)	$ (20,387)
Foreign	(771)	(1,659)
	$ (22,686)	$ (22,046)

A reconciliation of the total income tax provision tax rate to the statutory federal income tax rate of 34% for the years ended December 31, 2017 and 2016 is as follows:

	2017	2016
Income tax expense (benefit) at federal statutory rate	(34.0)%	(34.0)%
Income tax expense (benefit) at state statutory rate	(3.9)%	(3.4)%
Change in valuation allowance	(172.4)%	16.8%
Change in state rate	(0.8)%	(0.1)%
Permanent interest adjustments	0.2%	0.2%
Stock compensation	3.0%	12.7%
Research credit	(1.1)%	(1.4)%
Foreign rate differential	202.1%	0.8%
NOLs expiring and adjustments to NOL	7.0%	6.0%
Other, net	(0.2)%	2.5%
	(0.0)%	0.0%

The tax effects of temporary differences that give rise to significant portions of our deferred tax assets and deferred tax liabilities as of December 31, 2017 and 2016 are as follows (in thousands):

	2017	2016
Deferred tax assets:		
Allowances and reserves	$ 140	$ 573
Accrued expenses	154	701
Stock based compensation	1,065	1,947
Net operating loss carryforwards	87,426	125,182
Income tax credit carryforwards	8,587	7,764
Property and equipment, principally due to differences in depreciation	514	675
Other, net	45	48
	97,931	136,890
Valuation allowance	(97,089)	(134,873)
Total deferred tax assets, net of allowance	842	2,017
Deferred tax liabilities:		
Intangibles assets	(842)	(2,017)
Total deferred tax liability	(842)	(2,017)
Net deferred tax assets (liability)	$ —	$ —

We have established a valuation allowance against our net deferred tax assets due to the uncertainty surrounding the realization of such assets. We periodically evaluate the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred assets are realizable, the valuation allowance will be reduced. We have recorded a full valuation allowance of $97.1 million as of December 31, 2017 as we do not believe it is more likely than not our net deferred tax assets will be realized. We decreased our valuation allowance by approximately $37.8 million during the year ended December 31, 2017.

At December 31, 2017, we had federal, and state tax loss carry forwards of approximately $365.9 million, and $147.4 million. The federal and state net operating loss carry forwards begin to expire in 2019 and 2028, respectively, if unused. At December 31, 2017, we had federal and state tax credit carry forwards of approximately $5.1 million and $4.5 million, respectively, after reduction for uncertain tax positions. The Company has not performed a formal research and development

credit study with respect to these credits. The federal credits will begin to expire in 2018, if unused, and the state credits carry forward indefinitely.

Pursuant to the Internal Revenue Code (“IRC”) of 1986, as amended, specifically IRC §382 and IRC §383, our ability to use net operating loss and R&D tax credit carry forwards (“tax attribute carry forwards”) to offset future taxable income is limited if we experience a cumulative change in ownership of more than 50% within a three-year testing period. We have not completed an ownership change analysis pursuant to IRC Section 382 for taxable years ended after December 31, 2007. If ownership changes within the meaning of IRC Section 382 are identified as having occurred subsequent to 2007, the amount of remaining tax attribute carry forwards available to offset future taxable income and income tax expense in future years may be significantly restricted or eliminated. Further, our deferred tax assets associated with such tax attributes could be significantly reduced upon realization of an ownership change within the meaning of IRC §382.

In December 2017, the Tax Cuts and Jobs Act (the "2017 Act) was enacted. The 2017 Tax Act includes a number of changes to existing U.S. tax laws that impact the Company, most notably a reduction of the U.S. corporate income tax rate from 35 percent to 21 percent for tax years beginning after December 31, 2017. The 2017 Act also provides for a one-time transition tax on certain foreign earnings and the acceleration of depreciation for certain assets placed in service after September 27, 2017, as well as, prospective changes beginning in 2018, including additional limitations on executive compensation, limitations on the deductibility of interest and capitalization of research and development expenditures. While the 2017 Act provides for a territorial tax system, beginning in 2018, it includes two new U.S. tax base erosion provision, the global intangible low-taxed income ("GILTI") provisions and the base-erosion and anti-abuse tax ("BEAT") provisions.

Reduction of the U.S. Corporate Income Tax Rate: The Company measures deferred tax assets and liabilities using enacted tax rates that will apply in the years in which the temporary differences are expected to be recovered or paid. Accordingly, the Company's deferred tax assets and liabilities were premeasured to reflect the reduction in the U.S. corporate income tax rate from 35 percent to 21 percent, resulting in a $45.8 million increase in tax expense for the year ended December 31, 2017 and a corresponding $(45.8) million decrease in net deferred tax assets as of December 31, 2017. The impact was fully offset by a valuation allowance.

The Act will no longer allow deductions for compensation in excess of $1 million for certain employees, even if paid as commissions or performance based compensation. It also subjects the principal executive officer, principal financial officer and three other highest paid officers to the limitation and once the individual becomes a covered person, the individual will remain a covered person for all future years. The tax effects of these provisions require further analysis which is expected to be completed in the second half of 2018.

The 2017 Act provided for a one-time deemed mandatory repatriation of post-1986 undistributed foreign subsidiary earnings and profits ("E&P") through the year ended December 31, 2017. The Company's foreign subsidiary had an estimated accumulated deficit as of December 31, 2017. The Company does not expect it will be subject to this tax and therefore has not included any tax impacts related to the mandatory deemed repatriation in its consolidated financial statements.

The GILTI provisions require the Company to include in its US income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. While the Company may elect to account for GILTI tax in the period in which it is incurred, or recognize deferred taxes when basis differences exist that are expected to affect the amount of the GILTI inclusion upon reversal, the Company has not yet completed a detailed analysis of the GILTI and has not made a policy election as of December 31, 2017.

The BEAT provisions in the 2017 Act eliminates the deduction of certain base-erosion payments made to foreign corporations, and impose a minimum tax if greater than regular tax. The Company does not expect it will be subject to this tax and does not anticipate any tax impacts of BEAT with the filing of its consolidated financial statements for 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the 2017 Act. The Company has recognized provisional tax impacts related to the revaluation of deferred tax assets and liabilities and included these amounts in its consolidated financial statements for the year ended December 31, 2017. The ultimate impact may differ from these provisional amounts due to among other things, additional analysis, changes in interpretations and assumptions the Company has made, additional regulatory guidance that may be issued, and actions the Company may take as a result of the 2017 Act. The accounting is expected to be complete when the 2017 U.S. corporate income tax return is filed in 2018.

The Company follows the provisions of income tax guidance which provides recognition criteria and a related measurement model for uncertain tax positions taken or expected to be taken in income tax returns. The guidance requires that a position taken or expected to be taken in a tax return be recognized in the financial statements when it is more likely than not that the position would be sustained upon examination by tax authorities. Tax positions that meet the more likely than not threshold are then measured using a probability weighted approach recognizing the largest amount of tax benefit that is greater than 50%

likely of being realized upon ultimate settlement. The Company has not recognized any liability for uncertain tax positions as of December 31, 2017 and 2016.

Following is a tabular reconciliation of the unrecognized tax benefits activity during the years ended December 31, 2017 and 2016 (in thousands):

	2017	2016
Unrecognized Tax Benefits – Beginning	$ 2,062	$ 1,987
Gross increases – tax positions in prior period	—	1
Gross decreases – tax positions in prior period	—	(13)
Gross increase – current-period tax positions	95	87
Unrecognized Tax Benefits – Ending	$ 2,157	$ 2,062

The unrecognized tax benefit amounts are reflected in the determination of the Company's deferred tax assets. If recognized, none of these amounts would affect the Company's effective tax rate, since it would be offset by an equal reduction in the deferred tax asset valuation allowance. The Company does not foresee material changes to its liability for uncertain tax benefits within the next twelve months.

The Company did not recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses as of December 31, 2017.

The Company's material tax jurisdictions are United States and California. To its knowledge, the Company is currently not under examination by the Internal Revenue Service or any other taxing authority.

The Company's tax years for 1998 (federal) and 1997 (CA) and forward can be subject to examination by the United States and California tax authorities due to the carry forward of net operating losses and research development credits.

10. Employee Benefit Plan

We implemented a 401(k) retirement savings and profit sharing plan (the "Plan") effective January 1, 1999. We may make discretionary annual contributions to the Plan, which is allocated to the profit sharing accounts based on the number of years of employee service and compensation. At the sole discretion of the Board of Directors, we may also match the participants' contributions to the Plan. We made no discretionary or matching contributions to the Plan in 2017 or 2016.

11. Stockholders' Equity

Preferred Stock

The Company has authorized 5 million shares of preferred stock, par value $0.001 per share. The Company's Board of Directors is authorized to designate the terms and conditions of any preferred stock we issue without further action by the common stockholders. There were 13,500 shares of Series A 3.6% Convertible Preferred Stock that had been issued at December 31, 2017 and 2016, none of which were outstanding as of either date. All outstanding shares of the Series A 3.6% Convertible Preferred Stock were converted into common stock by the first quarter of 2015 at the option of the holders.

On November 27, 2017, the Company filed a Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock with the Delaware Secretary of State creating a new series of its authorized preferred stock, par value $0.001 per share, designated as the "Series B Convertible Preferred Stock". The number of shares initially constituting the Series B Convertible Preferred Stock was set at 10,000 shares. Pursuant to a registration statement on Form S-1, originally filed on August 14, 2017, as amended, and declared effective by the U.S. Securities and Exchange Commission ("SEC") on November 2, 2017, and related prospectus (as supplemented), the Company registered and distributed to holders of its common stock, at no charge, non-transferable subscription rights to purchase up to an aggregate of 10,000 units consisting of 10,000 shares of Series B Convertible Preferred Stock and 18 million warrants, with each warrant exercisable for one common stock at an exercise price of $0.3333 per share for 30 months from the date of issuance at any time after the date the stockholder approval to increase our authorized common stock share count. Pursuant to the 2017 Rights Offering, which closed on November 28, 2017, the Company sold an aggregate of 10,000 units, resulting in total net proceeds to the Company of approximately $8.8 million. The Company applied to list the warrants on Nasdaq under the symbol "CYTXS" to meet the minimum listing criteria to be accepted for listing on Nasdaq subsequent to attainment of stockholder approval. Based on the relevant authoritative accounting guidance, the warrants were equity classified at the issuance date. The warrants may be redeemed by the Company at $0.01 per warrant prior to their expiration if the Company's common stock closes above $0.833 per share for 10 consecutive trading days.

The fair value of the common stock into which the Series B Convertible Preferred Stock was convertible on the date of issuance exceeded the proceeds allocated to the preferred stock, resulting in the beneficial conversion feature that we recognized as a

dividend to the preferred stockholders and, accordingly, an adjustment to net loss to arrive at net loss allocable to common stockholders. We recorded a deemed dividend within additional paid-in capital of $4.0 million for the year ended December 31, 2017, related to a beneficial conversion feature included in the issuance of our Series B Convertible Preferred Stock. Approximately 75% of the of the outstanding shares of the Series B Convertible Preferred Stock were converted into common stock by December 31, 2017 at the option of the holders.

Common Stock

Pursuant to a registration statement on Form S-1, originally filed on April 6, 2016, as amended, and declared effective by the U.S. Securities and Exchange Commission ("SEC") on May 26, 2016, and related prospectus (as supplemented), the Company registered and distributed to its participating stockholders of record as of the announced May 20, 2016 record date, one non-transferable subscription right for each share of common stock held by each stockholder as of the record date ("2016 Rights Offering"). Each right entitled the holder thereof to purchase one unit at the subscription price of $2.55 per unit, composed of one share of common stock and 0.5 of a warrant, with each whole warrant exercisable to purchase one share of common stock at an exercise price of $3.06 per share for 30 months from the date of issuance. Pursuant to the 2016 Rights Offering, which closed on June 15, 2016, the Company sold an aggregate of 6,704,852 units, resulting in total net proceeds to the Company of $15.3 million. The warrants issued pursuant to the 2016 Rights Offering are currently listed on Nasdaq under the symbol "CYTXW." Based on the relevant authoritative accounting guidance, the warrants were equity classified at the issuance date. The warrants may be redeemed by the Company at $0.01 per warrant prior to their expiration if the Company's common stock closes above $7.65 per share for 10 consecutive trading days.

On December 22, 2016, the Company entered into a Purchase Agreement (the "Lincoln Park Purchase Agreement") with Lincoln Park Capital Fund, LLC ("Lincoln Park") pursuant to which the Company has the right to sell to Lincoln Park and Lincoln Park is obligated to purchase up to $20.0 million in amounts of shares, of the Company's common stock, over the 30-month period following March 30, 207. The Company may direct Lincoln Park, at the Company's sole discretion and subject to certain conditions, to purchase up to 100,000 shares of common stock on any business day but in no event will the amount of a single Regular Purchase (as defined in the Lincoln Park Purchase Agreement) exceed $1.0 million. The purchase price of shares of common stock related to the Regular Purchases will be based on the prevailing market prices of such shares at the time of sales. The Company's sales of shares of common stock to Lincoln Park under the Lincoln Park Purchase Agreement are limited to no more than the number of shares that would result in the beneficial ownership by Lincoln Park and its affiliates, at any single point in time, of more than 9.99% of the then outstanding shares of the common stock. There are no trading volume requirements or restrictions under the Lincoln Park Purchase Agreement. There is no upper limit on the price per share that Lincoln Park must pay for common stock under a Regular Purchase or an accelerated purchase and in no event will shares be sold to Lincoln Park on a day our closing price is less than the floor price of $0.50 per share as set forth in the Purchase Agreement. On December 22, 2016, the Company issued to Lincoln Park 127,419 shares of common stock with a market value on the date of issuance of approximately $0.2 million as commitment shares in consideration for entering into the Lincoln Park Purchase Agreement. The Company will issue up to an additional 382,258 shares of common stock on a pro rata basis to Lincoln Park only as and when shares are sold under the Lincoln Park Purchase Agreement to Lincoln Park. Through December 31, 2017, the Company has sold a total of 1.9 million shares under the Lincoln Park Purchase Agreement, for proceeds of approximately $1.7 million.

12. Stock-based Compensation

In August 2014, we adopted the 2014 Equity Incentive Plan (the "2014 Plan"), which provides our employees, directors and consultants the opportunity to purchase our common stock in the form of options (incentive or non-qualified), stock appreciation rights, restricted stock purchase rights, restricted stock bonuses, restricted stock units, performance shares, performance units, cash-based awards other stock-based awards, and deferred compensation awards. The 2014 Plan initially provides for issuance of 265,000 shares of our common stock. In August 2015, the Company amended the 2014 Plan to add 301,800 shares to its share pool. In addition, the amendment increased the number of "incentive stock options" which may be issued under the 2014 Plan by an identical amount. In May 2016, the Company amended the 2014 Plan to add 333,333 shares to its share pool. In May 2017, the Company amended the 2014 Plan to add 2,000,000 shares to its share pool.

On December 29, 2015, we adopted the 2015 New Employee Incentive Plan (the "2015 Plan"). Awards under the 2015 Plan may only be made to an employee who has not previously been an employee or member of the Board of any parent or subsidiary, or following a bona fide period of non-employment by the Company or a parent or subsidiary, if he or she is granted such award in connection with his or her commencement of employment with the Company or a subsidiary and such grant is an inducement material to his or her entering into employment with the Company or such subsidiary. The 2015 Plan provides for issuance of 66,666 shares. In January 2017, the Company amended the 2015 Plan to add 250,000 shares to its share pool.

As of December 31, 2017, there are 304,166 shares and 2,060,504 shares of common stock remaining and available for future issuances under the 2015 and 2014 Plans, respectively, which are exclusive of securities to be issued upon an exercise of outstanding options, warrants, and rights.

Stock Options

Generally, options issued under the 2014 Plan, are subject to four-year vesting, and have a contractual term of 10 years. Most options contain one of the following two vesting provisions:

- 12/48 of a granted award will vest after one year of service, while an additional 1/48 of the award will vest at the end of each month thereafter for 36 months, or
- 1/48 of the award will vest at the end of each month over a four-year period.

A summary of activity for the year ended December 31, 2017 is as follows:

	Options	Weighted Average Exercise Price
Balance as of January 1, 2017	636,112	$ 24.39
Granted	710,600	$ 1.47
Expired	(19,450)	$ 82.46
Cancelled/forfeited	(316,944)	$ 9.06
Balance as of December 31, 2017	1,010,318	$ 11.96

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Balance as of December 31, 2017	1,010,318	$ 11.96	7.95	$ —
Vested and expected to vest at December 31, 2017	893,185	$ 13.35	7.80	$ —
Exercisable at December 31, 2017	401,599	$ 26.89	6.45	$ —

There were no stock options exercised in 2017 or 2016.

The fair value of each option awarded during the year ended December 31, 2017 and 2016 was estimated on the date of grant using the Black-Scholes-Merton option valuation model based on the following weighted-average assumptions:

	Years ended December 31, 2017	2016
Expected term	6.6 years	6.0 years
Risk-free interest rate	2.20%	1.75%
Volatility	78.84%	77.56%
Dividends	—	—
Resulting weighted average grant date fair value	$ 1.05	$ 1.84

The weighted average risk-free interest rate represents the interest rate for treasury constant maturity instruments published by the Federal Reserve Board. If the term of available treasury constant maturity instruments is not equal to the expected term of an employee option, we use the weighted average of the two Federal Reserve securities closest to the expected term of the employee option.

The dividend yield has been assumed to be zero as we (a) have never declared or paid any dividends and (b) do not currently anticipate paying any cash dividends on our outstanding shares of common stock in the foreseeable future.

Restricted Stock Awards

Generally, restricted stock awards issued under the 2014 Plan are subject to a vesting period that coincides with the fulfillment of service requirements for each award and have a contractual term of 10 years. These awards are amortized to compensation expense over the estimated vesting period based upon the fair value of our common stock on the award date.

The following summarizes the total compensation cost recognized for the stock options and restricted stock awards in the accompanying financial statements (in thousands):

	Years ended December 31,	
	2017	2016
Total compensation cost for share-based payment arrangements recognized in the statement of operations	$ 753	$ 1,080

As of December 31, 2017, the total compensation cost related to non-vested stock options and stock awards not yet recognized for all our plans is approximately $0.6 million, which is expected to be recognized as a result of vesting under service conditions over a weighted average period of 1.5 years.

To settle stock options and restricted stock awards, we will issue new shares of our common stock. At December 31, 2017, we have an aggregate of 6,208,390 shares authorized and available to satisfy option exercises under our plans.

13. Quarterly Information (unaudited)

The following unaudited quarterly financial information includes, in management's opinion, all the normal and recurring adjustments necessary to fairly state the results of operations and related information for the periods presented (in thousands):

	For the three months ended			
	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Product revenues	$ 591	$ 969	$ 467	$ 662
Gross profit	(125)	262	(20)	29
Development revenues	1,018	531	1,306	867
Operating expenses	(6,336)	(6,374)	(5,629)	(4,526)
In process research and development acquired from Azaya	(1,686)	—	—	—
Other expense, net	(415)	(468)	(464)	(656)
Net income (loss)	$ (7,544)	$ (6,049)	$ (4,807)	$ (4,286)
Beneficial conversion feature for convertible preferred stock	—	—	—	(3,977)
Net income (loss) allocable to common stock holders	(7,544)	(6,049)	(4,807)	(8,263)
Basic and diluted net loss per share	$ (0.33)	$ (0.19)	$ (0.14)	$ (0.20)

	For the three months ended			
	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016
Product revenues	$ 1,333	$ 1,126	$ 731	$ 1,466
Gross profit	766	541	113	521
Development revenues	1,585	1,699	1,879	1,561
Operating expenses	(7,448)	(8,464)	(6,789)	(5,670)
Other expense, net	(242)	(181)	(587)	(1,330)
Net income (loss)	$ (5,339)	$ (6,405)	$ (5,384)	$ (4,918)
Beneficial conversion feature for convertible preferred stock	—	—	—	—
Net income (loss) allocable to common stock holders	(5,339)	(6,405)	(5,384)	(4,918)
Basic and diluted net loss per share	$ (0.41)	$ (0.43)	$ (0.26)	$ (0.24)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or furnished pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this Annual Report on Form 10-K. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this Annual Report were effective.

(b) Management's 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 Rule 13a-15(f) or 15d-15(f) under the Securities Exchange Act of 1934 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 our assets;
- 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 are being made only in accordance with authorizations of management and our Board of Directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

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

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have conducted an evaluation of the effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this annual report on Form 10-K based on the criteria set forth in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2017 based on the COSO criteria.

This report does not include an attestation report on internal control over financial reporting by the Company's independent registered public accounting firm since the Company is a smaller reporting company under the rules of the SEC.

(c) Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2017 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 following table sets forth biographical information regarding our directors as of February 28, 2018

DIRECTORS AND BUSINESS EXPERIENCE

Name	Age	Position
Richard J. Hawkins	69	Chairman of the Board
Marc H. Hedrick, MD	55	President and Chief Executive Officer and Director
Gregg A. Lapointe	59	Director
Gary A. Lyons	66	Director
Ronald A. Martell	56	Director

Richard J. Hawkins has served on our Board since December 2007. In 1982, Mr. Hawkins founded Pharmaco, a clinical research organization, or CRO, that merged with the predecessor of PPD-Pharmaco in 1991 and is one of the largest CROs in the world today. In 1992, Mr. Hawkins co-founded Sensus Drug Development Corporation, or SDDC, a privately-held company focused on the treatment of drugs to treat endocrine disorders, which developed and received regulatory approval for SOMAVERT®, a growth hormone antagonist approved for the treatment of acromegaly, which is now marketed by Pfizer, Inc., and he served as Chairman of SDDC until 2000. In 1994, Mr. Hawkins co-founded Corning Biopro, a contract protein manufacturing firm, where he served on the Board until Corning BioPro's sale to Akzo-Nobel, N.V., a publicly-held producer of paints, coatings and specialty chemicals, in 2000. In September 2003 Mr. Hawkins founded LabNow, Inc., a privately held company that develops lab-on-a-chip sensor technology, where he served as the Chairman and CEO until October 2009. Mr. Hawkins has served on the Board of SciClone Pharmaceuticals, Inc., a publicly-held specialty pharmaceutical company, from October 2004 through December 2017. In February 2011, Mr. Hawkins became CEO, and is currently CEO, of Lumos Pharma, Inc., a privately-held pharmaceutical company. He served on the Presidential Advisory Committee for the Center for Nano and Molecular Science and Technology at the University of Texas in Austin, and was inducted into the Hall of Honor for the College of Natural Sciences at the University of Texas. Mr. Hawkins is a member of the National Ernst & Young Entrepreneur of the Year Hall of Fame. Mr. Hawkins graduated cum laude with a B.S. in Biology from Ohio University, where he later received Ohio University Konneker Medal, the highest award given to a faculty member or former student for entrepreneurial excellence. Mr. Hawkins's qualifications to sit on our Board include his executive experience working with life sciences companies, his extensive experience in pharmaceutical research and development, his knowledge, understanding and experience in the regulatory development and approval process and his service on other public company boards and committees. On January 25, 2018, Mr. Hawkins was appointed to serve as Chairman of our Board of Directors and succeed Mr. David Rickey.

Marc H. Hedrick, M.D. was appointed as Chief Executive Officer of the Company in April 2014. He was appointed as President of the Company in May 2004, and joined us as Chief Scientific Officer and Medical Director in October 2002. Dr. Hedrick has also served as a member of our Board since October 2002. In December 2000, Dr. Hedrick co-founded and served as President and Chief Executive Officer and Director of StemSource, Inc., a privately-held company specializing in stem cell research and development, which was acquired by us in 2002. He is a plastic surgeon and is a former Associate Professor of Surgery and Pediatrics at the University of California, Los Angeles, or UCLA. From 1998 until 2005, he directed the Laboratory of Regenerative Bioengineering and Repair for the Department of Surgery at UCLA. Dr. Hedrick earned his M.D. degree from University of Texas Southwestern Medical School, Dallas and an M.B.A. from UCLA Anderson School of Management. Dr. Hedrick's qualifications to sit on our Board include his experience as a general, vascular and plastic surgeon; his academic appointments and achievements in the life sciences; his executive and managerial experience in stem cell research and scientific product development; and his foundational knowledge and experience of and contributions to our technology and operations. In addition, Dr. Hedrick has extensive global experience and familiarity with the cell therapy and regenerative medical industry.

Gregg A. Lapointe has served on our Board since March 2017. Mr. Lapointe is currently the Chief Executive Officer of Cerium Pharmaceuticals, Inc., a privately-held specialty pharmaceutical company. From April 2008 to March 2012, Mr. Lapointe served as Chief Executive Officer of Sigma-Tau Pharmaceuticals, Inc., a pharmaceutical company focused on rare disorders and the U.S. wholly-owned subsidiary of Sigma-Tau Finanziaria S.pA. He served as Chief Operating Officer of Sigma-Tau Pharmaceuticals, Inc. from November 2003 to March 2008. Mr. Lapointe also serves on the boards of Soligenix, Inc., a publicly-held biopharmaceutical company (since March 2009), Rigel Pharmaceuticals, Inc., a publicly-held biopharmaceutical company (since November 2017) and S1Biopharma, Inc. a privately held biopharmaceutical company. Mr. Lapointe previously served as a director of SciClone Pharmaceuticals, Inc., from March 2009 through October 2016, Raptor Pharmaceuticals Corp. from December 2014 until its acquisition by Horizon Pharma plc in October 2016. Mr. Lapointe is a Certified Public Accountant in the United States. He holds a Bachelor of Commerce degree from Concordia University of Montreal, a Graduate Diploma in Public Accountancy from McGill University of Montreal and an M.B.A. from Duke University. Mr. Lapointe's qualifications to sit on our Board include his substantial experience in finance, management and specialty drug commercialization, including operational experience as the CEO of a pharmaceutical development and sales organization.

Gary A. Lyons has served on our Board since October 2013. Mr. Lyons has served on the Board of Neurocrine Biosciences, Inc., or Neurocrine, since 1993 and served as the President and Chief Executive Officer of Neurocrine from 1993 through January 2008. Prior to joining Neurocrine, Mr. Lyons held a number of senior management positions at Genentech, Inc., including Vice President of Business Development and Vice President of Sales. Mr. Lyons has served on the Boards of Rigel Pharmaceuticals, Inc., a publicly-held biotechnology company, since October 2005 (and as Chairman since November 2014); Vical Incorporated, a publicly-held biopharmaceutical company, since 1997; Retrophin, Inc., a publicly-held biopharmaceutical company, since 2014 (and as Chairman since May 2016) and Novus Therapeutics, Inc., a publicly-held biopharmaceutical company, since Mary 2017. Mr. Lyons was previously a director of PDL BioPharma, Inc., Poniard Pharmaceuticals, Inc., Neurogesx, KaloBios Pharmaceuticals, Inc. and Facet Biotech Corporation. Mr. Lyons holds a B.S. in Marine Biology from the University of New Hampshire and an M.B.A. from Northwestern University's J.L. Kellogg Graduate School of Management. Mr. Lyons' qualifications to sit on our Board include his executive experience working with life sciences companies, his extensive experience in pharmaceutical business development, his knowledge, understanding and experience in the regulatory development and approval process and his service on other public company boards and committees.

Ronald A. Martell has served on our Board since December 2016. Mr. Martell has more than 25 years' experience building and managing unique businesses in the biotech industry. Mr. Martell is currently a founder of Achieve Life Sciences, ORCA BioSystems, Inc. and Cetya Therapeutics, Inc. Most recently he served as Chief Executive Officer of Sevion Therapeutics and Executive Chairman of KaloBios Pharmaceuticals, Inc. Prior to Sevion, Mr. Martell was President and CEO of NeurogesX and sold the company's assets to Acorda Therapeutics. Prior to NeurogesX he was Chief Executive Officer of Poniard Pharmaceuticals. Before joining Poniard he served in the capacity of the Office of the CEO and as Senior Vice President of Commercial Operations at ImClone Systems. Mr. Martell built ImClone Systems' Commercial Operations and field sales force to market and commercialize Erbitux® with partners Bristol-Myers Squibb and Merck KGaA. Prior to joining ImClone Systems, Mr. Martell worked for 10 years at Genentech, Inc., or Genentech, in a variety of positions, the last of which was Group Manager, Oncology Products. At Genentech, he was responsible for the launch of Herceptin® for metastatic HER-2 positive breast cancer and Rituxan® for non-Hodgkin's lymphoma. Mr. Martell began his career at Roche Pharmaceuticals. Mr. Martell's qualifications to sit on our Board include his executive experience working for life sciences companies, his extensive experience in pharmaceutical business development, his knowledge, understanding of and experience in developing and commercializing pharmaceutical products, and his service on other public company boards and committees.

EXECUTIVE OFFICERS AND BUSINESS EXPERIENCE

The following table sets forth biographical information regarding our executive officers as of February 28, 2018.

Name	Age	Position(s)
Marc H. Hedrick, M.D.(1)	55	President, Chief Executive Officer and Director
Tiago Girão	38	Vice President, Finance & Chief Financial Officer
John Harris	49	Vice President and General Manager of Cell Therapy

(1) See “Directors and Business Experience” above for biographical information regarding Dr. Hedrick.

Tiago Girão joined us as Vice President of Finance and Chief Financial Officer in September 2014. Mr. Girão joined us from NuVasive, Inc., or NuVasive, a publicly-held medical device company, where he last served as International Controller from February 2014 to August 2014. Prior to his position as International Controller, he served as NuVasive’s Director of Financial Reporting from March 2012 to February 2014. In his position as Director of Financial Reporting, Mr. Girao managed a team responsible for all corporate technical accounting and SEC-related matters for Nuvasive. Prior to joining NuVasive, Mr. Girão served as Senior Manager, Assurance at KPMG, LLP from October 2004 to March 2012. Prior to joining KPMG, Mr. Girão was a senior accountant for Ernst &Young in Brazil from October 2000 to August 2004. Mr. Girão is a certified public accountant with over 15 years’ experience in the accounting, finance and reporting for U.S. and public companies and substantial experience in global finance and operations.

John D. Harris has served as our Vice President and General Manager of Cell Therapy since he joined us in October 2015. Mr. Harris has over 20 years’ experience in medical device and biotechnology, most recently serving as the Vice President and General Manager of Becton Dickinson’s operations in Japan. Prior to Becton Dickinson, Mr. Harris held business development, product development, and marketing and sales leadership roles with Tyco Electronics (now TE Connectivity Corp.), Delphi Automotive, Sorenson Medical, Kimberly-Clark Healthcare and Ballard Medical Products. Mr. Harris is a member of the Board of Governors of the American Chamber of Commerce in Japan (ACCJ) and a member of the Executive Committee of the American Medical Device & Diagnostics Association, where he chairs the Regenerative Medicine Working Group. Mr. Harris holds Master of Business Administration and Bachelor of Arts degrees from the University of Utah. On February 5, 2018, Mr. Harris tendered his resignation from Cytori effective May 1, 2018.

CORPORATE GOVERNANCE

During 2017

- the Board held twenty meetings and took action via unanimous written consent three times;
- the Audit Committee met four times and did not take any actions via unanimous written consent;
- the Compensation Committee met two times and took action via unanimous written consent five times;
- the Governance and Nominating Committee met three times and took action via unanimous written consent one time;
- the Executive Committee met one time did not take action via unanimous written consent; and
- the sub-committee of the Executive Committee, comprised of our Chairman and our CEO, took action via unanimous written consent one time.

Each member of the Board attended seventy-five percent (75%) or more of the aggregate of (i) the total number of Board meetings held during the period of such member’s service and (ii) the total number of meetings of committees of the Board on which such member served, during the period of such member’s service.

All Board members are encouraged to attend our annual meetings of stockholders in person. However, in 2017, our stockholder meeting date did not coincide with our regularly scheduled quarterly Board meeting. Mr. Rickey, our Chairman at the time of our 2017 Annual Meeting of Stockholders, and Dr. Hedrick attended our 2017 Annual Meeting of Stockholders.

Board Independence

The Board has determined that Messrs. Hawkins, Lapointe, Lyons and Martell are “independent” under the rules of the NASDAQ Stock Market. The Board had previously determined that Mr. Rickey and Dr. Naughton were also “independent” under the

rules of the NASDAQ Stock Market when they served on the Board. Under applicable SEC and the NASDAQ rules, the existence of certain "related person" transactions above certain thresholds between a director and the Company are required to be disclosed and preclude a finding by the Board that the director is independent. The Board is not able to consider Dr. Hedrick, our President and Chief Executive Officer, independent, as a result of his employment with us during his tenure as one of our directors.

Board of Directors Leadership Structure

Our bylaws and governance principles provide the Board with the flexibility to combine or separate the positions of Chairman and Chief Executive Officer. Historically, these positions have been separate. Our Board believes that the separation of these positions strengthens the independence of our Board and allows us to have a Chairman focused on the leadership of the Board while allowing our Chief Executive Officer to focus more of his time and energy on managing our operations. The Board currently believes this structure works well to meet the leadership needs of the Board and of the Company. Dr. Hedrick, our President and Chief Executive Officer, has comprehensive industry expertise and is able to devote substantial time to the Company, and Mr. Hawkins, our Chairman, is able to devote focus on longer term and strategic matters, and to provide related leadership to the Board. As a result, we do not currently intend to combine these positions; however a change in this leadership structure could be made if the Board determined it was in the best long-term interests of stockholders based upon a departure of either our Chief Executive Officer or Chairman. For example, if the two roles were to be combined, we believe that the independence of the majority of our directors, and the three fully independent Board committees, would provide effective oversight of our management and the Company.

The Board's Role in Risk Oversight

The Board's role in risk oversight includes assessing and monitoring risks and risk management. The Board reviews and oversees strategic, financial and operating plans and holds management responsible for identifying and moderating risk in accordance with those plans. The Board fulfills its risk oversight function by reviewing and assessing reports from members of management on a regular basis regarding material risks faced by us Company and applicable mitigation strategy and activity. The reports cover the critical areas of operations, sales and marketing, development, regulatory and quality affairs, intellectual property, clinical development, legal and financial affairs. The Board and its Committees (described below) consider these reports; discuss matters with management and identify and evaluate any potential strategic or operational risks, and appropriate activity to address those risks.

Board Committees

The Board has standing Audit, Compensation, and Governance and Nominating Committees. All members of the Compensation Committee, Audit Committee, and Governance and Nominating Committee are independent directors.

Compensation Committee

The Compensation Committee currently consists of Mr. Lyons (Chairman) and Mr. Lapointe. In January 2018, Mr. Rickey and Dr. Naughton, former directors, stepped down of our Compensation Committee, and Mr. Lapointe joined the Compensation Committee to fill the vacancy created by Mr. Rickey's and Dr. Naughton's departure. Each of the members of our Compensation Committee is independent as defined by NASDAQ and a "Non-Employee Director" as defined by rule 16b-3(b)(3)(i) of the Securities Exchange Act of 1934, as amended. The Committee Chairman is responsible for setting the Committee's calendar and meeting agenda.

The Compensation Committee is responsible for developing and implementing compensation programs for our executive officers and other employees, subject only to the discretion of the full Board. More specifically, our Compensation Committee establishes base salary rates for each of the Company's officers, and administers our equity compensation plans. The Compensation Committee establishes the compensation and benefits for our Chief Executive Officer and other executive officers, and also reviews the relationship between our performance and our compensation policies as well as assessing any risks associated with our compensation policies. In addition, the Compensation Committee reviews, and advises the Board on director compensation matters and on, regional and industry-wide compensation practices and trends in order to assess the adequacy of our executive compensation programs. The charter of the Compensation Committee has been established and approved by the Board, and a copy of the charter has been posted on our website at www.cytori.com under Investor Relations – Corporate Governance.

Our CEO attends some of the meetings of the Compensation Committee upon invitation, but does not participate in the executive sessions of the Compensation Committee.

Audit Committee

Our Audit Committee currently consists of Mr. Lapointe (Chairman), Mr. Martell and Mr. Lyons. At the outset of 2017, Mr. Hawran and Mr. Hawkins were the members of our Audit Committee. Upon Mr. Hawran's departure in May 2017, Mr. Lapointe

joined the Audit Committee as Chairman. Further, upon the appointment of Mr. Hawkins as Chairman of our Board of Directors in January 2018, Mr. Hawkins stepped down from the Audit Committee and Mr. Martel joined the Audit Committee to fill the vacancy created. The Audit Committee is comprised solely of independent directors, as defined by NASDAQ. The Board has determined that Mr. Lapointe is an "audit committee financial expert" within the meaning of Item 407(d)(5) of SEC Regulation S-K. The charter of the Audit Committee has been established and approved by the Board, and a copy of the charter has been posted on our website at www.cytori.com under Investor Relations – Corporate Governance.

The Audit Committee selects our auditors, reviews the scope of the annual audit, approves the audit fees and non-audit fees to be paid to our auditors, and reviews our financial accounting controls with the staff and the auditors. The Audit Committee is also charged with review and oversight of management's enterprise risk management assessment.

Governance and Nominating Committee

Our Governance and Nominating Committee currently consists of Mr. Martell (Chairman) and Mr. Lyons. Mr. Martell replaced Mr. Hawkins as Chairman of Governance and Nominating Committee in January 2018. Mr. Lyons joined the Governance and Nominating Committee to fill the vacancy created by Dr. Naughton's departure. The Governance and Nominating Committee is comprised solely of independent directors, as defined by NASDAQ. The Governance and Nominating Committee interviews, evaluates, nominates and recommends individuals for membership on the Board, evaluates the effectiveness of the Board and its serving members, and recommends the structure, responsibility and composition of the committees of the Board. The Committee is also responsible for recommending guidelines and policies for corporate governance for adoption by the Board. The charter of the Governance and Nominating Committee has been established and approved by the Board, and a copy of the charter has been posted on our website at www.cytori.com under Investor Relations – Corporate Governance.

Executive Committee

During 2017, the Executive Committee was comprised of our Chief Executive Officer, Chairman of the Board, and Chairpersons of each committee of the Board. During 2017, the Executive Committee consisted of Dr. Hedrick, Mr. Rickey, Mr. Hawkins, Mr. Lapointe, and Mr. Lyons.

The Executive Committee's responsibilities, when such responsibilities are not discharged by our full Board, included evaluating and approving the material terms of any financing transactions or business transactions as well as authorizing and approving the issuance of stock and/or other equity securities. The Executive Committee also was able to act on behalf of the full Board in urgent or exigent circumstances wherein it would have been very difficult or impossible to assemble the full Board between regularly scheduled meetings. In 2017, our Executive Committee acted as a special pricing committee of the Board with respect to our confidentially marketed public offering financing, consummated in April 2017. The Sub-Committee of the Executive Committee, consisted of our Chairman of the Board and our Chief Executive Officer, had the authority to approve corporate expenditures presented by our management in excess of $250,000 up to a maximum of $1,000,000 for a single corporate transaction.

Effective January 25, 2018, upon Mr.Rickey's and Dr. Naughton's resignations from the Board, the Board of Directors decided to suspend the activities of the Executive Committee.

CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer. This Code of Business Conduct and Ethics has been posted on our website at www.cytori.com. We intend to post amendments to this code, or any waivers of its requirements, on our website at www.cytori.com under Investor Relations – Corporate Governance, as permitted under SEC rules and regulations.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, executive officers, and persons or entities who own more than ten percent of our common stock, to file with the SEC reports of beneficial ownership and changes in beneficial ownership of our common stock. Those directors, officers, and stockholders are required by regulations to furnish us with copies of all forms they file under Section 16(a). Based solely upon a review of the copies of such reports furnished to us and written representations from such directors, officers, and stockholders, we believe that all such reports required to be filed during 2017 were filed on a timely basis, except for the report filed by Mr. Lyons in February 2018, related to an acquisition of securities from November 2017.

Item 11. Executive Compensation

Our named executive officers for fiscal year 2017 are:

- Marc H. Hedrick, M.D., our President and Chief Executive Officer;
- Tiago Girao, our Chief Financial Officer; and
- John Harris, our Vice President and General Manager of Cell Therapy.

These individuals are collectively referred to in this discussion as the “named executive officers,” or “NEOs.” Investors are encouraged to read this discussion in conjunction with the compensation tables and related notes, which include more detailed information about the compensation of our NEOs for 2017 and 2016.

2017 Summary Compensation Table

The following table sets forth information concerning compensation earned during 2016 and 2017 for services rendered to us by our NEOs.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Name and Principal Position	Year	Salary	Stock Awards	Option Awards(2)	Non-Equity Incentive Plan Comp. (3)	All Other Comp-ensation	Total
Marc H. Hedrick, M.D.,	2017	$ 500,000	—	$ 116,182	$ 140,250	89,607(4)	$ 846,039
President and Chief Executive Officer	2016	$ 450,000	—	$ 156,273	$ 146,250	—	$ 752,523
Tiago M. Girao,	2017	$ 307,500	—	$ 48,205	$ 72,615	46,360(4)	$ 474,680
VP of Finance, Chief Financial Officer and Chief Accounting Officer	2016	$ 265,000	—	$ 65,535	$ 79,560	—	$ 410,095
John Harris,	2017	$ 358,750	—	$ 48,205	$ 64,890	$93,957(4)	$ 565,802
VP and General Manager of Cell Therapy(5)	2016	$ 361,830(6)	—	$ 65,535	$ 64,365	$125,249(1)	$ 616,979

(1) Per the terms of his employment offer letter with us, in 2016, Mr. Harris was eligible to receive a housing allowance while on assignment in Japan up to a maximum of 13,900,000 Japanese Yen per year, including direct payment by us of Mr. Harris' local rent (not to exceed 1,100,000 Japanese Yen per month) and additional healthcare coverage. We paid these benefits in Japanese Yen, and we recorded them in 2016 at the average exchange rate of 0.0086 Japanese Yen to U.S. dollar. During 2016, Mr. Harris' rent expense was $111,994, and cost of his additional health care coverage was $13,255.

(2) This column represents the dollar amount of the aggregate grant date fair value of option awards granted in the applicable fiscal year, computed in accordance with FASB ASC Topic 718. For information relating to the assumptions made by us in valuing the option awards made to our NEOs in 2017 and 2016, refer to Note 12 to our audited consolidated financial statements included in this Form 10-K. These amounts do not reflect the actual economic value that will be realized by our NEOs upon vesting of the stock options, exercise of the stock options, or sale of the common stock underlying the stock options.

(3) The amounts in column (f) reflect the cash awards under our EMIC Plan, which is discussed in further detail below under the heading in the subsection entitled "*Executive Management Incentive Compensation Plan*" of the "Narrative Disclosure to Compensation Tables" below.

(4) For 2017, this column includes life insurance premiums paid by the Company for each of the named executive officers and the payout of accrued paid time off in connection with our restructuring in 2017 in the following amounts: Dr. Hedrick, $81,482; Mr. Girão, $43,526; and Mr. Harris, $38,128. In addition, during 2017, the Company paid directly to third party vendors $50,260 related to the relocation of Mr. Harris from Tokyo to San Diego.

(5) During 2016, we paid Mr. Harris in Japanese Yen. His 2016 salary was reported at the average exchange rate over the year, or 0.0086 Japanese Yen to US dollar.

(6) On February 5, 2018, Mr. Harris tendered his resignation from Cytori effective May 1, 2018.

Narrative Disclosures to Summary Compensation Table

Executive Compensation

In the process of determining compensation for our NEOs, the Compensation Committee considers the current financial position of the Company, the strategic goals of the Company and the performance of each of our NEOs. The Committee also benchmarks the various components (described below) of our compensation program for executives to compensation paid by other public companies in our defined peer group, compensation data from Radford Global Life Sciences Survey and BIOCOM Total Rewards Survey, historical review of all executive officer compensation, and recommendations from our CEO (other than for his own salary). From time to time the Committee engages the services of outside compensation consultants to provide compensation research, analysis and recommendations. The Committee has the sole authority to select, compensate and terminate its external advisors.

The Compensation Committee utilizes the following components of compensation (described further below) to strike an appropriate balance between promoting sustainable and excellent performance and discouraging any inappropriate short-sighted risk-taking behavior:

- Base salary;
- Annual long-term equity compensation;
- Personal benefits and perquisites; and
- Acceleration and severance agreements tied to changes on control of the Company.

Base Salaries

In connection with determination of executive compensation for fiscal year 2017, the Compensation Committee directed Marsh & McLennan, LLC, its independent compensation consultant, to prepare an updated senior management compensation assessment. The Compensation Committee reviewed this assessment at its normally scheduled meeting in January 2017. Based on this assessment and including other data points and information considered by the Compensation Committee in its discretion, the Compensation Committee approved the following NEO base salaries for fiscal year 2017, which base salaries went into effect in March 2017: Dr. Hedrick: $510,000; Mr. Harris: $360,500; Mr. Girao: $309,000. The increases to Dr. Hedrick's and Mr. Girao's base salaries were made to move such salaries closer to or within the 50th and 60th percentile range of base salary compensation for similarly situated executive at our peer companies, per our corporate compensation philosophy. Our compensation analysis indicates that Dr. Hedrick's base salary is substantially closer to, but still below, this stated range, while Mr. Girao's base salary is now within this stated range. Mr. Harris' base salary remains above our stated range, but we believe that the Mr. Harris' actual duties and responsibilities, combined with his experience and skills (including Japanese linguistic and business/cultural fluency) are appropriately reflected in his base salary and other compensation.

Marsh & McLennan did not provide any services to us in 2017 beyond its engagement as an advisor to the Compensation Committee on compensation matters. After review and consultation with Marsh & McLennan, the Compensation Committee has determined that Barney & Barney is independent and there is no conflict of interest resulting from retaining Marsh & McLennan currently or during the year ended December 31, 2017. In reaching these conclusions, the Compensation Committee considered the factors set forth in Exchange Act Rule 10C-1 and NASDAQ listing standards.

None of our NEOs received base salary increases for 2018.

Annual Bonuses (Executive Management Incentive Compensation Plan)

Our Compensation Committee adopted the Cytori Therapeutics Executive Management Incentive Compensation, or EMIC, plan to increase the performance-based component of our executives' compensation by linking their annual cash bonus payments to achievement of shorter-term performance goals. Target bonuses are reviewed annually and established as a percentage of the executives' base salaries, generally based upon seniority of the officer and targeted at or near the median of the peer group (with reference to our corporate compensation philosophy) and relevant survey data (including the Radford Global Life Sciences Survey and BIOcom Total Rewards Survey). Each year the Compensation Committee establishes corporate and individual objectives and respective target percentages, taking into account recommendations from our Chief Executive Officer as it relates to executive positions other than the Chief Executive Officer's compensation. Our Chief Executive Officer's EMIC plan is set by the Compensation Committee to align entirely with our overall corporate objectives, while the other NEOs are also provided individual goals that constitute a portion of their overall EMIC plans. After each fiscal year-end, our Chief Executive Officer provides the Compensation Committee with a written evaluation showing actual performance as compared to corporate and/or individual objectives, and the Compensation Committee uses that information, along with the overall corporate performance, to determine what percentage of each executive's bonus target will be paid out as a bonus for that year. Overall, we attempt to set the corporate and individual functional goals to be highly challenging yet attainable.

For 2017, the general corporate goals approved by the Board (upon recommendation of the Compensation Committee for purposes of executive compensation) were determined by the Compensation Committee to account for 100% of the target cash bonus amount payable under the EMIC plan for our Chief Executive Officer, Dr. Hedrick, and to account for 75% of the overall target bonus amount payable under the EMIC plans for our other NEOs. The Company's general corporate objectives included clinical, financial and operational objectives, including the pipeline expansion goals; the achievement of certain year-end cash objectives, revenue goals and business development objectives; and various operational objectives.

The following individual objectives for the NEOs other than Dr. Hedrick expanded upon their particular functions in the overall corporate objectives and were to weighted as 25% of their respective overall target bonus amounts.

Mr. Girão's individual objectives included the achievement of certain investor-related, liquidity, and operating cash management goals.

Mr. Harris's individual objectives included achievement of certain revenue, product utilization and business development/partnering goals.

Our NEOs' target bonuses for 2017 as a percentage of base salary were as follows: Dr. Hedrick, 55% (increased from 50% in 2016); Mr. Girao, 40% (unchanged from 2015); and Mr. Harris, 40% (increased from 30% in 2016). The Compensation Committee, in its January 2018 meeting, evaluated our achievement in 2017 as compared to overall the corporate and individual

objectives for the NEOs in the 2017 EMIC Plan described above. The Committee evaluated the overall results and then evaluated the NEOs' achievement relative to their own functional objectives and the results are tabulated in the table below:

Officer and Position	Target Bonus as a % of Salary	% of Target Bonus Awarded	Bonus Awarded as a % of Salary	Amount of 2017 Bonus Payable in 2018(1)
Marc H. Hedrick, M.D. President & CEO	55%	50.0%	27.5%	$ 140,250
Tiago M. Girao, Chief Financial Officer	40%	58.75%	23.5%	$ 72,615
John Harris VP & General Manager of Cell Therapy	40%	45.0%	18%	$ 64,890

(1) The 2017 bonus amounts are payable in 2018 in installments as follows: 25% of such amounts are payable on April 1, 2018, 25% of such amounts are payable on July 1, 2018, 25% of such amounts are payable on October 1, 2018 and the remaining 25% of such amounts are payable on December 31, 2018.

As part of its determination of target executive compensation for fiscal year 2018, the Compensation Committee determined bonus targets for our NEOs based on materials and information, as deemed necessary or appropriate by the Compensation Committee in its discretion. Upon completion of this review, the Compensation Committee approved target bonuses (as a percentage of base salary) for our NEOs for fiscal year 2018 as follows: Dr. Hedrick: 55%; Mr. Girao: 40%; Mr. Harris: 40%.

Long-Term Equity Compensation

We designed our long-term equity grant program to further align the interests of our executives with those of our stockholders and to reward the executives' longer-term performance. Historically, the Compensation Committee has granted individual option grant awards, although from time-to-time, to further increase the emphasis on compensation tied to performance, the Compensation Committee may grant other equity awards as allowed by the 2014 Equity Incentive Plan. The Compensation Committee grants stock options, restricted stock, restricted stock units and similar equity awards permitted under our plans based on its judgment as to whether the complete compensation packages to our executives, including prior equity awards, are appropriate and sufficient to retain and incentivize the executives and whether the grants balance long-term versus short-term compensation. The Compensation Committee also considers our overall performance as well as the individual performance of each NEO, and the potential dilutive effect of restricted stock awards, and the dilutive and overhang effect of the equity grant awards, and recommendations from the Chief Executive Officer (other than with respect to his own equity awards).

Stock options are granted with an exercise price equal to the fair market value of our common stock on the date of grant.

In March 2017, our NEOs were granted stock options to acquire shares of our common stock at an exercise price equal to the fair market value of our common stock on the Nasdaq Stock Market as of the date of grant, vesting in accordance with our standard four-year vesting schedule. Specifically, Dr. Hedrick, Mr. Girao and Mr. Harris were granted options to purchase 96,350, 31,100 and 31,100 shares of our common stock, respectively.

Personal Benefits and Perquisites

All of our executives are eligible to participate in our employee benefit plans, including medical, dental, vision, life insurance, short-term and long-term disability insurance, flexible spending accounts, 401(k), and an Employee Stock Purchase Program (ESPP). These plans are available to all full-time employees. In keeping with our philosophy to provide total compensation that is competitive within our industry, we offer limited personal benefits and perquisites to executive officers that include supplemental long-term disability insurance. You can find more information on the amounts paid for these perquisites to or on behalf of our NEOs in our 2017 Summary Compensation Table.

Company Acquisition / Post-Termination Compensation

We have entered into individual change of control and severance agreements, or CIC Agreements, with each of our NEOs. The CIC Agreements provide for certain severance benefits to be paid to each of our NEOs in the event of his involuntary termination without cause, or due to the executive's resignation for good reason (including the Company's material breach of its obligations, material reduction in duties, responsibilities, compensation or benefits, or relocation by more than 30 miles without prior consent), provided such termination or resignation occurs in connection with an acquisition of the Company. Upon such termination or resignation in the event of an acquisition, Dr. Hedrick would receive a lump sum payment of 18 times his monthly base salary, and 18 times his monthly COBRA payments, and Mr. Girão and Mr. Harris would each receive a lump sum payment of 12 times his monthly

base salary, and 12 times his monthly COBRA payments. Notwithstanding the foregoing, these NEOs' employment may be terminated for cause (including extended disability, repudiation of their CIC Agreements, conviction of a plea of no contest to certain crimes or misdemeanors, negligence that materially harms us, failure to perform material duties without cure, drug or alcohol use that materially interferes with performance, and chronic unpermitted absence) without triggering an obligation for us to pay severance benefits under the CIC Agreements.

In addition, under the CIC Agreements, any unvested stock options granted to each of the above named executive officers would vest in full upon (1) the date of the executive's termination under the circumstances described above following entry into an acquisition agreement (subject to the actual consummation of the acquisition) or (2) consummation of an acquisition.

In all events, each NEO's entitlement to the benefits described above is expressly conditioned upon his execution and delivery to us of a CIC Agreement and a general release of claims, in the form attached to each CIC Agreement.

Outstanding Equity Awards at December 31, 2017

The following table sets forth information regarding outstanding equity awards held by our NEOs as of December 31, 2017.

	Option Awards				
Name	Option Grant Date (1)	Number of Securities Underlying Unexercised Options (#) Exercisable(5)	Number of Securities Underlying Unexercised Options (#) Un-Exercisable (2)(5)	Option Exercise Price ($)(5)	Option Expiration Date
Marc H. Hedrick, M.D., President and Chief Executive Officer	1/31/2008	4,000	—	$ 77.10	1/31/2018
	1/29/2009	5,000	—	$ 72.00	1/29/2019
	2/05/2010	7,333	—	$ 100.65	2/05/2020
	1/27/2011	3,666	—	$ 83.55	1/27/2021
	1/26/2012	7,666	—	$ 51.60	1/26/2022
	1/31/2013	12,222	—	$ 41.10	1/31/2023
	1/31/2013	6,111	—	$ 75.00	1/31/2023
	4/11/2014	17,815	1,185	$ 35.00	4/11/2024
	8/21/2014	6,666	—(3)	$ 21.00	8/21/2024
	1/30/2015	12,004	3,996	$ 7.20	1/30/2025
	1/04/2016	28,970	26,643	$ 2.81	1/04/2026
	3/08/2017	20,073	76,277	$ 1.55	3/08/2027
Tiago M. Girao, VP of Finance Chief Financial Officer	9/2/2014	8,544(4)	1,456	$ 20.40	9/2/2024
	1/30/2015	6,008(4)	1,992	$ 7.20	1/30/2025
	1/04/2016	12,149	11,173	$ 2.81	1/04/2026
	3/08/2017	6,479	24,621	$ 1.55	3/08/2027
John Harris, VP and General Manager Cell Therapy	11/11/2015	12,103(4)	10,230	$ 5.55	11/11/2025
	1/04/2016	12,149(4)	11,173	$ 2.81	1/04/2026
	3/08/2017	6,479	24,621	$ 1.55	3/08/2027

(1) For a better understanding of this table, we have included an additional column showing the grant date of the stock options.

(2) Unless otherwise provided, stock options are subject to four-year vesting, and have a contractual term of 10 years from the date of grant. Awards presented in this table contain one of the following two vesting provisions:

- With respect to an initial stock option grant to an employee, 25% of the shares subject to the award vest on the one-year anniversary of the vesting start date, while an additional 1/48th of the remaining option shares vest at the end of each month thereafter for 36 consecutive months, or
- With respect to stock option grants made to an employee after one full year of employment, 1/48th of the shares subject to the award vest at the end of each month over a four-year period, as measured from the vesting start date.

(3) The August 2014 stock option awards vested as to 50% of the shares subject to such awards after one year of service and the additional 50% vested on the second anniversary of the grant.

(4) These options were granted during the first year of the NEO's employment and thus were subject to the following vesting schedule: 25% of the shares subject to the award vest on the one-year anniversary of the vesting start date, while an additional 1/48th of the remaining option shares vest at the end of each month thereafter for 36 consecutive months.

(5) We consummated a 1-for-15 reverse stock split in May 2016. The amounts set forth in this column reflect this 1-for-15 reverse stock split.

Director Compensation

Generally, our Board believes that the level of director compensation should be based on time spent carrying out Board and committee responsibilities and be competitive with comparable companies. In addition, the Board believes that a significant portion of director compensation should align director interests with the long-term interests of stockholders. The Board makes changes in its director compensation practices only upon the recommendation of the Compensation Committee, and discussion and approval by the Board.

The following table summarizes director compensation awarded to, earned by or paid to our non-employee directors who served on our Board during fiscal year 2017.

(a)	(b)	(c)	(d)	(e)
Director Name[1]	**Fees Earned or Paid in Cash[2] ($)**	**Stock Awards ($)**	**Option Awards[3][5] ($)**	**Total ($)**
David M. Rickey, Chairman[2]	$ 40,000	—	$ 39,000	$ 79,000
Richard J. Hawkins [2]	$ 32,500	—	$ 39,000	$ 71,500
Paul W. Hawran[6]	$ 30,000	—	$ 39,000	$ 69,000
Gary A. Lyons	$ 33,333	—	$ 39,000	$ 72,333
Gail K. Naughton, Ph.D. [2]	$ 30,000	—	$ 39,000	$ 69,000
Gregg Lapointe[4]	$ 40,000	—	$ 80,000	$ 120,000
Ronald A. Martel	$ 49,167	—	$ 78,000	$ 127,167

(1) Dr. Hedrick is not included in this table as he is an employee of ours and receives no extra compensation for his service as a director. The compensation received by Dr. Hedrick in his capacity as an employee is set forth in the 2017 Summary Compensation Table and further described in the "Narrative Disclosures to Summary Compensation Table" above

(2) On January 25, 2018, as part of the ongoing restructuring of the Company, David M. Rickey and Gail K. Naughton, Ph.D. submitted their resignations as members of our Board of Directors, effective immediately, and the Board of Directors decreased its size from seven to five members. In addition, Richard J. Hawkins was appointed to serve as Chairman to succeed Mr. Rickey.

(3) Column (d) represents the grant date fair value of the option awards, computed in accordance with FASB ASC Topic 718, granted to our non-employee directors during 2017. For additional information on the valuation assumptions with respect to the 2017 grants, refer to Note 12 to our audited consolidated financial statements included in this Form 10-K, regarding assumptions underlying valuation of equity awards. These amounts do not reflect the actual economic value that will be realized by our non-employee directors upon vesting of the stock options, exercise of the stock options or sale of the common stock underlying the stock.

(4) Mr. Lapointe joined our Board in March 2017.

(5) As of December 31, 2017, our non-employee directors held the following aggregate options: Mr. Rickey: 27,727 options; Richard Hawkins: 36,396 options; Paul Hawran: 37,728 options; Mr. Lyons: 31,654 options; Ronald Martell: 50,000 options; Gregg Lapointe: 50,000 options; and Dr. Naughton: 31,654 options.

(6) Mr. Hawran resigned from the Board of Directors in May 2017.

Director Compensation Program

In October 2016, the Compensation Committee approved a Director Compensation Program for fiscal year 2017, as subsequently amended. The materials elements of the 2017 Director Compensation Program are as follows:

- $40,000 annual cash retainer for Board members (an increase from $30,000 in 2016);
- $30,000 annual cash retainer for the Chairman of the Board (no change from 2016);
- $20,000 annual cash retainer for the Chairman of the Audit Committee (no change from 2016);

- $15,000 annual cash retainer for the Chairman of our Compensation Committee and Governance and Nominating Committee (no change from 2016);
- $10,000 annual cash retainer for each non-Chairman committee member (no change from 2016);
- *Initial grants for new directors*: Initial option grant, upon commencement of services, to purchase 50,000 shares of our common stock, vesting over two years in equal, annual installments as measured from the grant date;
- *Annual grants for existing directors*: Recurring option grants to purchase 25,000 shares of our common stock, vesting in one installment on the first anniversary of the grant date.

The Compensation Committee believed that these enhancements to the Director Compensation Program allow us to remain aligned with director compensation practices at our peer companies.

On July 27, 2017, as the Company considered its plans to curtail expenses, the Board of Directors, following the Compensation Committee's recommendation, decided to suspend the cash compensation under the Director Compensation Program for the remainder of 2017. Further, it decided to provide a one-time $25,000 cash retainer to both Mr. Lapointe and Mr. Martell for their ongoing input and support with the Company's strategic and tactical activities.

On January 25, 2018, the Board of Directors, following the Compensation Committee's recommendation, decided to reinstate the Director Compensation Program effective January 1, 2018. Further, considering the ongoing cash constraints of the Company, the Board of Directors decided to amend the cash components of the Director Compensation Program for 2018 as follows:

- $30,000 annual cash retainer for Board members;
- $20,000 annual cash retainer for the Chairman of the Board;
- $12,500 annual cash retainer for the Chairman of the Audit Committee;
- $7,500 annual cash retainer for the Chairman of our Compensation Committee and Governance and Nominating Committee; and
- $2,500 annual cash retainer for each non-Chairman committee member.

The equity components of the Director Compensation Program for 2018 remain unchanged from those in effect in 2017 and described above.

The Compensation Committee believes that these enhancements to the Director Compensation Program allow us to remain aligned with director compensation practices at our peer companies while considering the ongoing cash constraints of the Company.

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

The information under the heading "Equity Compensation Plan Information" in Part II, Item 5 is incorporated herein by reference.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding ownership of our Common Stock as of February 28, 2018 (or earlier date for information based on filings with the SEC) by (a) each person known to us to own more than 5% of the outstanding shares of our Common Stock, (b) each director and nominee for director, (c) our President and Chief Executive Officer, VP of Finance and Chief Financial Officer and each other NEO named in the compensation tables in this Annual Report on Form 10-K and (d) all directors and executive officers as a group.

The information in this table is based solely on statements in filings with the SEC or other reliable information. We believe, based on information provided to us, that each of the stockholders listed below has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

A total of 61,607,797 shares of our common stock were issued and outstanding as of February 28, 2018.

Name and Address of Beneficial Owner (1)	Number of Shares of Common Stock Owned (2)	Number of Shares of Common Stock Subject to Awards/Warrants Exercisable Within 60 Days (3)	Total Number of Shares of Common Stock Beneficially Owned (4)	Percent Ownership
Swissquote Bank SA(5)	5,328,229	—	5,328,229	8.6%
Chemin de la Crétaux 33				
1196 Gland, Switzerland				
PostFinance AG(6)	4,543,086	—	4,543,086	7.4%
Mingerstrasse 20				
3030 Bern, Switzerland				
Marc H. Hedrick, M.D.	78,133	193,780	271,913	*
Tiago M. Girao	14,084	41,461	55,545	*
John D. Harris	7,000	37,894	44,894	
Richard J. Hawkins	8,433	52, 472	60,905	*
Gary A. Lyons	4,357	37,404	41,761	*
Ronald A. Martell	—	25,000	25,000	*
Gregg Lapointe	—	25,000	25,000	*
All executive officers and directors as a group	112,006	384,211	496,218	0.8%

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares as of February 28, 2018.

(1) Unless otherwise indicated, the address of each of the named individuals is c/o Cytori Therapeutics, Inc., 3020 Callan Road, San Diego, CA 92121.

(2) Unless otherwise indicated, represents shares of outstanding common stock owned by the named parties as of February 28, 2018.

(3) Shares of common stock subject to stock options or warrants currently exercisable or exercisable within 60 days of February 28, 2018 are deemed to be outstanding for computing the percentage ownership of the person holding such options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person.

(4) The amounts and percentages of common stock beneficially owned are reported on the basis of regulations of the SEC governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of such security, or "investment power," which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities for which that person has a right to acquire beneficial ownership within 60 days.

(5) Based upon a Form 4 filed January 11, 2018, reporting beneficial ownership as of January 11, 2018

(6) Based upon a Form 4 filed February 15, 2018, reporting beneficial ownership as of February 14, 2018

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

The following includes a summary of transactions since January 1, 2017 to which we have been a party in which the amount involved exceeded or will exceed $120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest. We also describe below certain other transactions with our directors, executive officers and 5% stockholders. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, from unaffiliated third parties.

Rights Offering

In November 2017, we consummated a rights offering, or Rights Offering, to our stockholders of record (as of October 27, 2017) to subscribe for units at a subscription price of $1,000 per unit. Pursuant to the Rights Offering, we sold an aggregate of 10,000 units consisting of a total of 10,000 shares of Series B Convertible Preferred Stock and 18,000,000 warrants to our stockholders, or Warrants, with each Warrant exercisable for one share of common stock at an exercise price of $0.3333 per share. Certain of our directors participated in the Rights Offering and along with other participants in the Rights Offering, purchased common stock and Warrants to purchase our common stock.

Director and Officer Indemnification

Our amended and restated certificate of incorporation, as amended, and our amended and restated bylaws, as amended, provide that we will indemnify each of our directors and officers to the fullest extent permitted by the Delaware General Corporation Law.

Stock Option Grants to Executive Officers and Directors

We have granted stock options to our executive officers and non-employee directors as more fully described elsewhere in this Form 10-K.

The information under the heading “Board Independence” in Part III, Item 10 is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

On July 12, 2016, we notified KPMG, LLP, or KPMG, of its dismissal as our independent registered public accounting firm, effective as of that date. The decision to change independent registered public accounting firms was recommended by our Audit Committee and was approved by the Board.

On July 12, 2016, the Audit Committee appointed BDO USA, LLP, or BDO, as our independent registered public accounting firm for the fiscal year ending December 31, 2016, subject to completion of its standard client acceptance procedures (which were subsequently completed). The decision to engage BDO as our independent registered public accounting firm was recommended by the Audit Committee and approved by the Board. The Audit Committee reviews and must pre-approve all audit and non-audit services performed by our independent registered public accounting firm, as well as the fees charged by it for such services. No fees charged by KPMG or BDO during 2016 were approved under the Regulation S-X Rule 2.01(c)(7)(i)(C) exception to the pre-approval requirement. In its review of non-audit service fees, the Audit Committee considers, among other things, the possible impact of the performance of such services on the accounting firm’s independence.

The following table shows the aggregate fees paid or accrued by us for the audit and other services provided by BDO for the fiscal years ended December 31, 2017 and 2016.

	Fiscal Year Ended December 31,	
	BDO	
	2017	2016
Audit Fees (1)	$ 378,000	$ 281,000
Audit Related Fees (2)	—	—
Tax Fees (3)	32,000	35,000
Total	$ 410,000	$ 316,000

) (1) Audit fees consist of fees for professional services performed by BDO USA, LLP for the audit of our annual financial statements included in this Form 10-K filing and review of financial statements included in our quarterly Form 10-Q filings, reviews of registration statements and issuances of consents, and services that are normally provided in connection with statutory and regulatory filings or engagements.

) (2) Audit related fees consist of fees for assurance and related services, performed by BDO USA, LLP that are reasonably related to the performance of the audit or review of our financial statements.

) (3) Tax fees consist of fees for professional services performed by BDO USA, LLP with respect to tax compliance, tax advice, tax consulting and tax planning.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) (1) Financial Statements

(a) (2) Financial Statement Schedules

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

For the years ended December 31, 2017 and 2016
(in thousands)

	Balance at beginning of year	Additions (A)	Deductions (B)	Other (C)	Balance at end of year
Allowance for doubtful accounts					
Year ended December 31, 2017	$ 167	$ —	$ —	$ —	$ 167
Year ended December 31, 2016	$ 797	$ —	$ (630)	$ —	$ 167

(A) Includes charges to costs and expenses.

(B) Deductions for uncollectible accounts receivable includes payments collected and devices recovered from customers.

(C) Miscellaneous activity.

(a) (3) Exhibits

List of Exhibits required by Item 601 of Regulation S-K. See Item 15(b) below.

(b) Exhibits

The exhibits listed in the accompanying "Exhibit Index" are filed, furnished or incorporated by reference as part of this Annual Report, as indicated.

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

CYTORI THERAPEUTICS, INC.					
Exhibit Number	**Exhibit Title**	**Filed with this Form 10-K**	**Incorporated by Reference**		
			Form	**File No.**	**Date Filed**
3.1	Composite Certificate of Incorporation.		10-K	000-32501 Exhibit 3.1	03/11/2016
3.2	Amended and Restated Bylaws of Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 3.2	08/14/2003
3.3	Amendment to Amended and Restated Bylaws of Cytori Therapeutics, Inc.		8-K	001-34375 Exhibit 3.1	05/06/2014
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A 3.6% Convertible Preferred Stock		8-K	001-34375 Exhibit 3.1	10/08/2014
3.5	Certificate of Amendment to Amended and Restated Certificate of Incorporation, as amended		8-K	001-34375 Exhibit 3.1	05/10/2016
3.6	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock		8-K	001-34375 Exhibit 3.1	11/28/2017
4.1	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on October 14, 2008 in favor of Silicon Valley Bank, pursuant to the Loan and Security Agreement dated October 14, 2008.		10-K	000-32501 Exhibit 10.62	03/06/2009
4.2	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 11, 2010 in favor of GE Capital Equity Investments, Inc., pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.73	06/17/2010
4.3	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 11, 2010 in favor of Silicon Valley Bank, pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.74	06/17/2010
4.4	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 11, 2010 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.75	06/17/2010
4.5	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on September 9, 2011 in favor of GE Capital Equity Investments, Inc., pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.84	09/15/2011
4.6	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on September 9, 2011 in favor of Silicon Valley Bank, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.85	09/15/2011

4.7	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on September 9, 2011 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.86	09/15/2011
4.8	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on September 9, 2011 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.87	09/15/2011
4.9	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.17	08/09/2013
4.10	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.18	08/09/2013
4.11	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.19	08/09/2013
4.12	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.20	08/09/2013
4.13	Warrant to Purchase Common Stock issued by Cytori Therapeutics, Inc. on June 28, 2013 in favor of Silicon Valley Bank pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.21	08/09/2013
4.14	Form of Warrant to Purchase Common Stock for Investors in the Units issued in May 2014.		8-K	001-34375 Exhibit 4.1	05/30/2014
4.15	Form of Warrant to Purchase Common Stock for Placement Agent of the Units issued in May 2014.		8-K	001-34375 Exhibit 4.2	05/30/2014
4.16	Form of Amendment to Warrant to Purchase Common Stock.		8-K	001-34375 Exhibit 4.1	09/08/2014
4.17	Form of Warrant to Purchase Common Stock.		8-K	001-34375 Exhibit 4.2	09/08/2014
4.18	Form of Warrant for Purchasers of the Units issued in October 2014.		8-K	001-34375 Exhibit 4.1	10/08/2014
4.19	Form of Initial Warrant to Purchase Common Stock.		8-K	001-34375 Exhibit 4.1	05/05/2015
4.20	Form of Additional Warrant to Purchase Common Stock.		8-K	001-34375 Exhibit 4.2	05/05/2015
4.21	Form of Pre-Funded Warrant to Purchase Common Stock.		8-K	001-34375 Exhibit 4.3	05/05/2015
4.22	Amendment to Common Stock Purchase Warrant.		10-K	001-34375 Exhibit 4.23	03/11/2016
4.23	Amendment to Series A-1 Warrant to Purchase Common Stock.		10-K	001-34375 Exhibit 4.24	03/11/2016

4.24	Amendment to Series A-2 Warrant to Purchase Common Stock.		10-K	001-34375 Exhibit 4.25	03/11/2016
4.25	Form of Non-Transferable Subscription Rights Certificate issued in 2016.		S-1/A	333-210628 Exhibit 4.26	05/11/2016
4.26	Form of Series R Warrant.		S-1/A	333-210628 Exhibit 4.27	05/11/2016
4.27	Form of Series S Warrant.		S-1/A	333-219967 Exhibit 4.27	10/03/2017
4.28	Form of Warrant Agent Agreement between Cytori Therapeutics, Inc. and Broadridge Corporate Issuer Solutions, Inc.		S-1/A	333-210628 Exhibit 4.28	05/11/2016
4.29	Form of Warrant by and between Cytori Therapeutics, Inc. and Maxim Group LLC.		8-K	000-32501 Exhibit 4.1	04/12/2017
4.30	Form of Restated Warrant by and between Cytori Therapeutics, Inc. and Broadridge Corporate Issuer Solutions, Inc.		10-Q	001-34375 Exhibit 4.2	08/11/2017
4.31	Form of Non-Transferable Subscription Rights Certificate.		S-1/A	333-219967 Exhibit 4.31	10/03/2017
4.32	Form of Warrant Agent Agreement between Cytori Therapeutics, Inc. and Broadridge Corporate Issuer Solutions, Inc.		S-1/A	333-219967 Exhibit 4.32	10/03/2017
4.33	Form of Common Stock Certificate.	X			
10.1#	Amended and Restated 1997 Stock Option and Stock Purchase Plan.		10-12G	000-32501 Exhibit 10.1	03/30/2001
10.2#	2004 Equity Incentive Plan of Cytori Therapeutics, Inc.		8-K	000-32501 Exhibit 10.1	08/27/2004
10.3#	Form of Options Exercise and Stock Purchase Agreement Relating to the 2004 Equity Incentive Plan.		10-Q	000-32501 Exhibit 10.23	11/15/2004
10.4#	Form of Notice of Stock Options Grant Relating to the 2004 Equity Incentive Plan.		10-Q	000-32501 Exhibit 10.24	11/15/2004
10.5+	License & Royalty Agreement, effective August 23, 2007, by and between Olympus-Cytori, Inc. and Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 10.49	11/13/2007
10.7	Common Stock Purchase Agreement, dated February 8, 2008, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc.		8-K	000-32501 Exhibit 10.51	2/19/2008
10.8	Amendment No. 1, dated February 29, 2008, to Common Stock Purchase Agreement, dated February 8, 2008, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc.		8-K	000-32501 Exhibit 10.51	2/29/2008
10.9	Lease Agreement entered into on April 2, 2010, between HCP Callan Rd, LLC. and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.69	05/06/2010
10.10	Common Stock Purchase Agreement, dated December 6, 2010, by and among Cytori Therapeutics, Inc. and Astellas Pharma Inc.		8-K	001-34375 Exhibit 10.76	12/09/2010
10.11#	Form of Notice and Restricted Stock Award Agreement for grants of performance-based restricted stock awards under the 2004 Equity Incentive Plan.		8-K	001-34375 Exhibit 10.1	03/04/2011
10.12	First Amendment to Lease Agreement entered into on November 4, 2011, between HCP Callan Rd, LLC. and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.88	11/08/2011

10.13#	2011 Employee Stock Purchase Plan		DEF 14A	001-34375 Appendix A	05/02/2011
10.14	Contract HHSO100201200008C dated September 27, 2012, by and between Cytori Therapeutics, Inc. and the U.S. Department of Health and Human Services Biomedical Advanced Research and Development Authority.		S-1/A	333-219967 Exhibit 10.14	10/03/2017
10.15	Joint Venture Termination Agreement dated May 8, 2013 by and between Cytori Therapeutics, Inc. and Olympus Corporation.		10-Q	001-34375 Exhibit 10.91	05/10/2013
10.16+	Puregraft Sale-License-Supply Agreement, dated July 30, 2013, by and between Cytori Therapeutics, Inc. and Bimini Technologies LLC.		10-Q/A	001-34375 Exhibit 10.93	11/12/2013
10.17+	Amended and Restated License and Supply Agreement dated January 30, 2014, by and between Cytori Therapeutics, Inc. and Lorem Vascular Pty. Ltd.		8-K	001-34375 Exhibit 10.94	02/04/2014
10.18	Sales Agreement, dated May 12, 2014, by and between Cytori Therapeutics, Inc. and Cowen and Company, LLC.		8-K	001-34375 Exhibit 10.1	05/12/2014
10.19	Contract HHSO100201200008C Amendment No. 1 dated August 18, 2014, by and between Cytori Therapeutics, Inc. and the U.S. Department of Health and Human Services Biomedical Advanced Research and Development Authority.		8-K	001-34375 Exhibit 10.99	08/19/2014
10.20	Form of Securities Purchase Agreement by and between Cytori Therapeutics, Inc. and the Purchasers (as defined therein), dated as of October 8, 2014.		8-K	001-34375 Exhibit 10.1	10/08/2014
10.21	Amendment of Solicitation/Amendment of Contract, effective December 17, 2014, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-K	001-34375 Exhibit 10.21	03/24/2017
10.22	Amendment of Solicitation/Modification of Contract, effective January 5, 2015, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-K	001-34375 Exhibit 10.22	03/24/2017
10.23	Amendment One to the Securities Purchase Agreement, dated March 16, 2015, between Cytori Therapeutics, Inc. and certain institutional investors.		10-Q	001-34375 Exhibit 10.1	05/11/2015
10.24	Form of Securities Purchase Agreement, dated May 5, 2015, by and among Cytori Therapeutics, Inc. and the investors named therein.		8-K	001-34375 Exhibit 10.1	05/05/2015
10.25	Placement Agency Agreement, dated May 5, 2015, by and between Cytori Therapeutics, Inc. and Mizuho Securities USA Inc.		8-K	001-34375 Exhibit 10.2	05/05/2015
10.26	Amendment One to Joint Venture Termination Agreement, dated April 30, 2015, by and between Cytori Therapeutics, Inc. and Olympus Corporation.		8-K	001-34375 Exhibit 10.1	05/05/2015
10.27	Loan and Security Agreement, dated May 29, 2015, by and between Cytori Therapeutics, Inc. and Oxford Finance, LLC.		10-Q	001-34375 Exhibit 10.4	08/10/2015
10.28	First Amendment to Loan and Security Agreement, dated September 20, 2017, by and between Cytori Therapeutics, Inc. and Oxford Finance, LLC.		S-1/A	333-219967 Exhibit 10.45	10/03/2017

10.29	Amendment One to the Securities Purchase Agreement between Cytori Therapeutics, Inc. and certain institutional investors dated May 5, 2015.		10-K	001-34375 Exhibit 10.111	03/11/2016
10.30#	2015 New Employee Incentive Plan.		8-K	001-34375 Exhibit 10.1	01/05/2016
10.31#	Form of Agreement for Acceleration and/or Severance.		10-K	001-34375 Exhibit 10.113#	03/11/2016
10.32#	Form of Stock Option Agreement under the New Employee Incentive Plan.		S-8	333-210211 Exhibit 99.4	03/15/2016
10.33#	Form of Notice of Grant of Stock Option under the 2015 New Employee Incentive Plan.		S-8	333-210211 Exhibit 99.5	03/15/2016
10.34#	2014 Equity Incentive Plan of Cytori Therapeutics, Inc., as amended and restated.		DEF 14A	001-34375 Appendix A	04/10/2017
10.35	Amendment Two to Joint Venture Termination Agreement, dated January 8, 2016.		10-Q	001-34375 Exhibit 10.4	05/10/2016
10.36	Amendment of Solicitation/Amendment of Contract, effective April 1, 2016, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.1	08/05/2016
10.37	Amendment of Solicitation/Amendment of Contract, effective September 9, 2016, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.1	11/09/2016
10.38	Purchase Agreement between Cytori Therapeutics, Inc. and Lincoln Park Capital Fund, LLC, dated December 22, 2016.		8-K	001-34375 Exhibit 10.1	12/29/2016
10.39	Registration Rights Agreement between Cytori Therapeutics, Inc. and Lincoln Park Capital Fund, LLC, dated December 22, 2016.		8-K	001-34375 Exhibit10.2	12/29/2016
10.40#	Third Amendment to the Cytori Therapeutics, Inc. 2014 Equity Incentive Plan, dated January 26, 2017.		10-K	001-34375 Exhibit 10.39	03/24/2017
10.41+	Asset Purchase Agreement by and between Cytori Therapeutics, Inc. and Azaya Therapeutics, Inc., effective January 16, 2017.		10-K	001-34375 Exhibit 10.40	03/24/2017
10.42	Lease Agreement, dated February 27, 2017, by and between 6262 Lusk Investors LLC and Cytori Therapeutics, Inc.		10-K	001-34375 Exhibit 10.41	03/24/2017
10.43	First Amendment to Lease Agreement, dated July 27, 2017, by and between 6262 Lusk Investors LLC and Cytori Therapeutics, Inc.	X			
10.44	Second Amendment to Lease Agreement, dated September 7, 2017, by and between 6262 Lusk Investors LLC and Cytori Therapeutics, Inc.	X			
10.45	Termination of Lease Agreement, dated February 21, 2018, by and between 6262 Lusk Investors LLC and Cytori Therapeutics, Inc.		8-K	001-34375 Exhibit 10.1	02/23/2018
10.46#	First Amendment to the Cytori Therapeutics, Inc. 2015 New Employee Incentive Plan, dated Jan. 26, 2017.		10-K	001-34375 Exhibit 10.42	03/24/2017
10.47	Sixth Amendment of Solicitation/Modification of Contract, effective April 14, 2017, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.1	05/12/2017
10.48	Seventh Amendment of Solicitation/Modification of Contract, effective May 19, 2017, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.3	08/11/2017

10.49	Eighth Amendment of Solicitation/Modification of Contract, effective May 23, 2017, by and between ASPR-BARDA and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.4	08/11/2017
23.1	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm	X			
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of Principal Financial and Accounting Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certifications Pursuant to 18 U.S.C. Section 1350/ Securities Exchange Act Rule 13a-14(b), as adopted pursuant to Section 906 of the Sarbanes - Oxley Act of 2002	X			
101.INS	XBRL Instance Document	X			
101.SCH	XBRL Schema Document	X			
101.CAL	XBRL Calculation Linkbase Document	X			
101.DEF	XBRL Definition Linkbase Document	X			
101.LAB	XBRL Label Linkbase Document	X			
101.PRE	XBRL Presentation Linkbase Document	X			

 # Indicates management contract or compensatory plan or arrangement.

+ Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

SIGNATURES

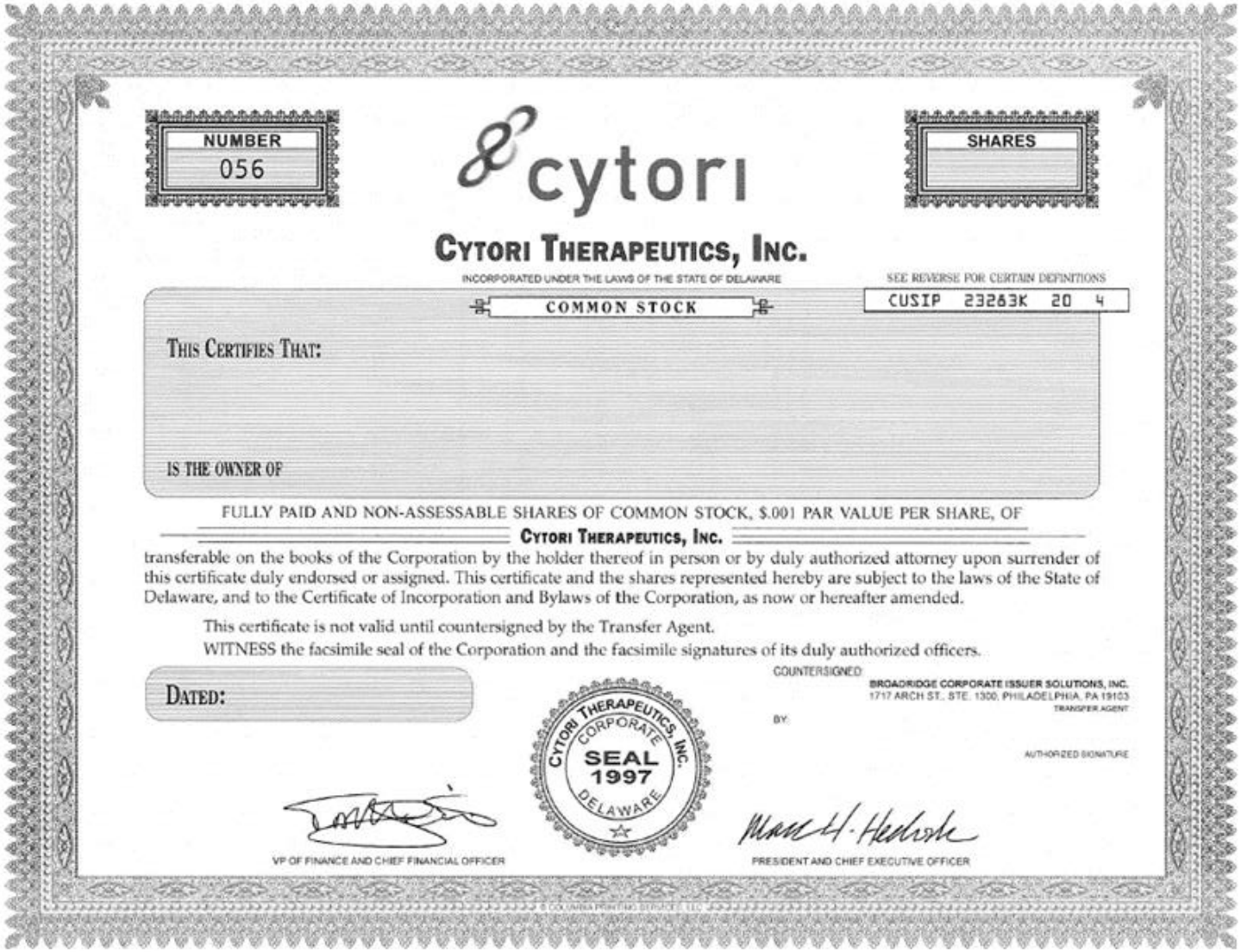
Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

CYTORI THERAPEUTICS, INC.

By: /s/ Marc H. Hedrick, MD
Marc. H. Hedrick, MD
President & Chief Executive Officer
March 9, 2018

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

SIGNATURE	TITLE	DATE
/s/ Richard J. Hawkins Richard J. Hawkins	Chairman of the Board	March 9, 2018
/s/ Marc H. Hedrick, MD Marc H. Hedrick, MD	*President & Chief Executive Officer (Principal Executive Officer)*	March 9, 2018
/s/ Tiago M. Girão Tiago M. Girão	*VP of Finance and Chief Financial Officer (Principal Financial and Accounting Officer)*	March 9, 2018
/s/ Gregg A. Lapointe Gregg A. Lapointe	*Director*	March 9, 2018
/s/ Gary A. Lyons Gary A. Lyons	*Director*	March 9, 2018
/s/ Ronald A. Martell Ronald A. Martell	*Director*	March 9, 2018



NUMBER
056

cytori

SHARES

CYTORI THERAPEUTICS, INC.

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

SEE REVERSE FOR CERTAIN DEFINITIONS

COMMON STOCK

CUSIP 23283K 20 4

THIS CERTIFIES THAT:

IS THE OWNER OF

FULLY PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK, $.001 PAR VALUE PER SHARE, OF

CYTORI THERAPEUTICS, INC.

transferable on the books of the Corporation by the holder thereof in person or by duly authorized attorney upon surrender of this certificate duly endorsed or assigned. This certificate and the shares represented hereby are subject to the laws of the State of Delaware, and to the Certificate of Incorporation and Bylaws of the Corporation, as now or hereafter amended.

This certificate is not valid until countersigned by the Transfer Agent.

WITNESS the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.

DATED:

CYTORI THERAPEUTICS, INC. CORPORATE SEAL 1997 DELAWARE

COUNTERSIGNED:

BROADRIDGE CORPORATE ISSUER SOLUTIONS, INC.
1717 ARCH ST., STE. 1300, PHILADELPHIA, PA 19103
TRANSFER AGENT

BY:

AUTHORIZED SIGNATURE

VP OF FINANCE AND CHIEF FINANCIAL OFFICER

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Exhibit 4.33

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	-	*as tenants in common*
TEN ENT	-	*as tenants by the entireties*
JT TEN	-	*as joint tenants with right of survivorship and not as tenants in common*

UNIF GIFT MIN ACT- .....*Custodian*.....
(Cust) *(Minor)*
under Uniform Gifts to Minors
Act……
(State)

Additional abbreviations may also be used though not in the above list.

*For Value Received,*_____*hereby sell, assign and transfer unto*

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

(PLEASE PRINT ORTYPE NAME AND ADDRESS, INCLUDING ZIP CODE, OFASSIGNEE)

_____ *Shares*

of the stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____ *Attomey*

to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _____

NOTICE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITI EN UPON THE FACE OF THE CERTIFICATE IN EVERYPARTICULAR, WITHOUT ALTERATIONOR ENLARGEMENT OR ANY CHANGE WI<ATSOEVER.

Signature(s) Guaranteed

By_____
The Signature(s) must be guaranteed by an eligible guarantor institution (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions with membership in an approved Signature Guarantee Medallion Program), pursuant to SEC Rule 17Ad-15.

THE CORPORATION WILL FURNISH TO ANY STOCKHOLDER, UPON REQUEST AND WITHOUT CHARGE, A FULL STATEMENT OF THE DESIGNATIONS RELATIVE RIGHTS, PREFERENCES ANO LIMITATIONS OF THE SHARES OF EACH CLASS ANO SERIES AUTHORIZED TO BE ISSUED, SO FAR AS THE SAME HAVE BEEN DETERMINED, ANO OF THE AUTHORITY IF ANY, OF THE BOARD TO DIVIDE THE SHARES INTO CLASSES OR SERIES ANO TO DETERMINE AND CHANGE THE RELATIVE RIGHTS, PREFERENCES AND LIMITATIONS OF ANY CLASS OR SERIES. SUCH REQUEST MAY BE MADE TO THE SECRETARY OF THE CORPORATION OR TO THE TRANSFER AGENT NAMED ON THIS CERTIFICATE

FIRST AMENDMENT TO LEASE AGREEMENT

This **FIRST AMENDMENT TO LEASE AGREEMENT** ("**Amendment**") is entered into as of July 27, 2017 ("**Effective Date**"), by and between 6262 LUSK INVESTORS LLC, a California limited liability company ("**Landlord**"), and CYTORI THERAPEUTICS, INC., a Delaware corporation ("**Tenant**"), with reference to the facts set forth in the Recitals below.

RECITALS

A. Landlord and Tenant are parties to that certain Lease Agreement dated as of February 27, 2017 ("**Lease**"), for certain Premises known as Suite 200 within the Project located at 10222 Barnes Canyon Road (formerly known as 6262 Lusk Boulevard), San Diego, California 92121, as more particularly described in the Lease.

B. Landlord intends to improve the Project with certain capital improvements, including, without limitation, upgraded electrical and mechanical systems, a solar electricity system and an energy management system (collectively, "**Energy Improvements**"). Pursuant to Section 6.1.1(j) of the Lease, the cost of the Energy Improvements is includable in Operating Expenses; however, in lieu thereof, Landlord and Tenant have agreed to increase the Basic Rent payable under the Lease.

C. Landlord and Tenant now desire to enter into this Amendment to memorialize such agreement, as more fully provided below.

AMENDMENT

NOW, THEREFORE, in consideration of the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Basic Rent. Notwithstanding any provision of the Lease to the contrary, the Basic Rent schedule shall be as follows:

Months of Initial Term	Basic Rent per Rentable Square Foot ($/mo)	Monthly Installments of Basic Rent ($/mo)	Annual Basic Rent ($/yr)
1-12*	$2.24	$66,077.76	$792,933.12
13-24	$2.31	$68,142.69	$817,712.28
25-36	$2.38	$70,207.62	$842,491.44
37-48	$2.45	$72,272.55	$867,270.60
49-60	$2.52	$74,337.48	$892,049.76
61-63	$2.60	$76,697.40	$920,368.80

*Provided that Tenant is not in default under the Lease beyond any applicable notice and cure period, monthly installments of Basic Rent shall be abated fifty percent (50%) during months two

(2) through seven (7) of the Initial Term pursuant to the term and conditions of Section 5.1 of the Lease.

2. Defined Terms. Unless otherwise specifically defined in this Amendment, terms with initial capital letters in this Amendment shall have the same meaning as such terms have in the Lease.

3. Interpretation. Landlord and Tenant acknowledge and agree that each of them, and their respective professional advisors, have reviewed this Amendment and that the provisions of this Amendment shall not be construed against either party. The rule of construction that ambiguities are to be construed against the party drafting the agreement shall not apply to the interpretation of this Amendment and is waived.

4. Counterpart Execution. This Amendment may be executed in multiple counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which together shall constitute one instrument.

5. Continued Effect. Except as specifically modified by this Amendment, all of the terms, conditions and provisions of the Lease shall remain in full force and effect.

[signatures on following page]

IN WITNESS WHEREOF, the parties have executed this First Amendment to Lease Agreement as of the Effective Date.

LANDLORD: 6262 LUSK INVESTORS LLC,
a California limited liability company

By:B/L Lusk LLC,
a California limited liability company,
Managing Member

By: _/s/ Steve Bollert_____
Name: _Steve Bollert_____
Title: __Managing Member_____

TENANT: CYTORI THERAPEUTICS, INC.,
a Delaware corporation

By: _/s/ Tiago Girao_____
Name: __Tiago Girao_____
Title: ___CFO_____

By: ___/s/ Marc Hedrick_____
Name: ___Marc Hedrick _____
Title: ____President and CEO_____

1130430/33729774v.1

SECOND AMENDMENT TO LEASE AGREEMENT

This **SECOND AMENDMENT TO LEASE AGREEMENT** ("**Amendment**") is entered into as of September 7, 2017 ("**Effective Date**"), by and between 6262 LUSK INVESTORS LLC, a California limited liability company ("**Landlord**"), and CYTORI THERAPEUTICS, INC., a Delaware corporation ("**Tenant**"), with reference to the facts set forth in the Recitals below.

RECITALS

A. Landlord and Tenant are parties to that certain Lease Agreement dated as of February 27, 2017, as amended by that certain letter agreement dated July 14, 2017, and executed by Tenant on July 27, 2017, and that certain First Amendment to Lease Agreement dated as of July 27, 2017 (collectively, "**Lease**"), for certain Premises known as Suite 200 within the Project located at 10222 Barnes Canyon Road (formerly known as 6262 Lusk Boulevard), San Diego, California 92121, as more particularly described in the Lease.

B. As an accommodation to Tenant, Landlord has agreed to (i) extend the Scheduled Commencement Date provided in Section 1.10 of the Lease from November 1, 2017, to January 1, 2018, and (ii) make corresponding modifications to the Work Schedule for construction of the Tenant Improvements (as defined in the Work Letter Agreement attached to the Lease).

C. Landlord and Tenant now desire to modify the Lease as set forth below in this Amendment.

AMENDMENT

NOW, THEREFORE, in consideration of the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Scheduled Commencement Date. Notwithstanding any provision of the Lease to the contrary, the "**Scheduled Commencement Date**" shall be January 1, 2018.

2. Work Schedule. Notwithstanding any provision of the Lease to the contrary, the "**Work Schedule**" for the Tenant Improvements shall mean the schedule attached hereto as Exhibit "A".

3. Excess Costs. Notwithstanding any provision of the Lease to the contrary, Tenant shall be obligated to pay to Landlord as Excess Costs (as defined in Section 2 of the Work Letter Agreement) the incremental increase in the total costs and expenses incurred by Landlord to construct the Tenant Improvements in accordance with the modified Work Schedule.

4. Defined Terms. Unless otherwise specifically defined in this Amendment, terms with initial capital letters in this Amendment shall have the same meaning as such terms have in the Lease.

5. Interpretation. Landlord and Tenant acknowledge and agree that each of them, and their respective professional advisors, have reviewed this Amendment and that the provisions of this Amendment shall not be construed against either party. The rule of construction that ambiguities are to be construed against the party drafting the agreement shall not apply to the interpretation of this Amendment and is waived.

6. Counterpart Execution. This Amendment may be executed in multiple counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which together shall constitute one instrument.

7. Continued Effect. Except as specifically modified by this Amendment, all of the terms, conditions and provisions of the Lease shall remain in full force and effect, including, without limitation, Tenant's obligation to increase the Letter of Credit Amount to Five Hundred Thousand and 00/100 Dollars ($500,000.00) on November 1, 2017, pursuant to Section 7.1 of the Lease. Concurrently with the execution and delivery of this Amendment, Tenant shall pay to Landlord the first monthly installment of Rent (i.e., $71,970.36) in accordance with Section 5.1 of the Lease.

[signatures on following page]

IN WITNESS WHEREOF, the parties have executed this Second Amendment to Lease Agreement as of the Effective Date.

LANDLORD: 6262 LUSK INVESTORS LLC,
a California limited liability company

By:B/L Lusk LLC,
a California limited liability company,
Managing Member

By: _/s/ Steve Bollert_____
Name: _Steve Bollert_____
Title: __Managing Member_____

TENANT: CYTORI THERAPEUTICS, INC.,
a Delaware corporation

By: _/s/ Tiago Girao_____
Name: __Tiago Girao_____
Title: ___CFO_____

By: ___/s/ Marc Hedrick_____
Name: ___Marc Hedrick _____
Title: ____President and CEO_____

EXHIBIT “A”

WORK SCHEDULE

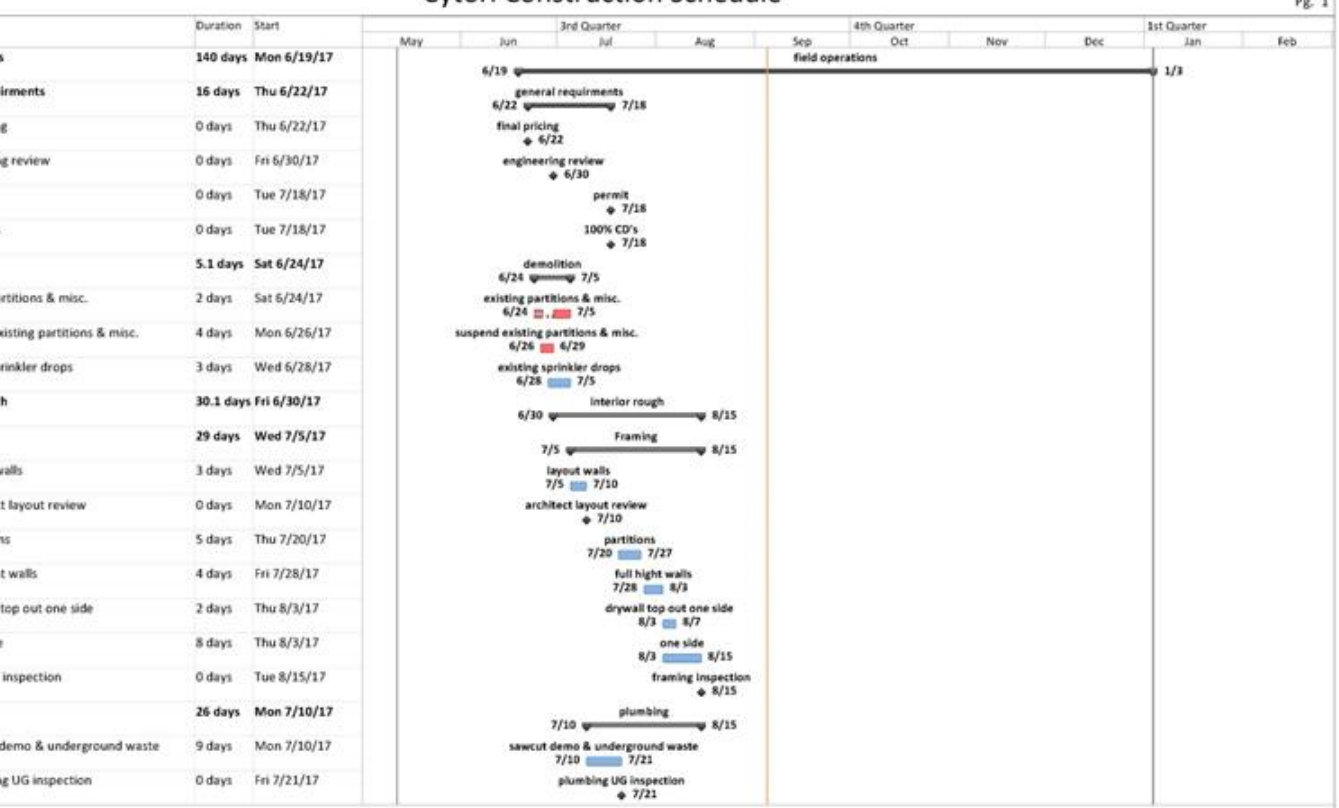
Exhibit "A"
2

By: Larry Stewardson

Cytori Construction Schedule

Job # 17-074
Pg. 1

ID	Task Name	Duration	Start
1	**field operations**	**140 days**	**Mon 6/19/17**
2	**general requirments**	**16 days**	**Thu 6/22/17**
3	final pricing	0 days	Thu 6/22/17
4	engineering review	0 days	Fri 6/30/17
5	permit	0 days	Tue 7/18/17
6	100% CD's	0 days	Tue 7/18/17
7	**demolition**	**5.1 days**	**Sat 6/24/17**
8	existing partitions & misc.	2 days	Sat 6/24/17
9	suspend existing partitions & misc.	4 days	Mon 6/26/17
10	existing sprinkler drops	3 days	Wed 6/28/17
11	**interior rough**	**30.1 days**	**Fri 6/30/17**
12	**Framing**	**29 days**	**Wed 7/5/17**
13	layout walls	3 days	Wed 7/5/17
14	architect layout review	0 days	Mon 7/10/17
15	partitions	5 days	Thu 7/20/17
16	full hight walls	4 days	Fri 7/28/17
17	drywall top out one side	2 days	Thu 8/3/17
18	one side	8 days	Thu 8/3/17
19	framing inspection	0 days	Tue 8/15/17
20	**plumbing**	**26 days**	**Mon 7/10/17**
21	sawcut demo & underground waste	9 days	Mon 7/10/17
22	plumbing UG inspection	0 days	Fri 7/21/17



print date: Tue 9/5/17
1:53 PM

BYCOR GENERAL CONSTRUCTION

File: Cytori Const. Sch-DELAY
Filter: - 100% field opps

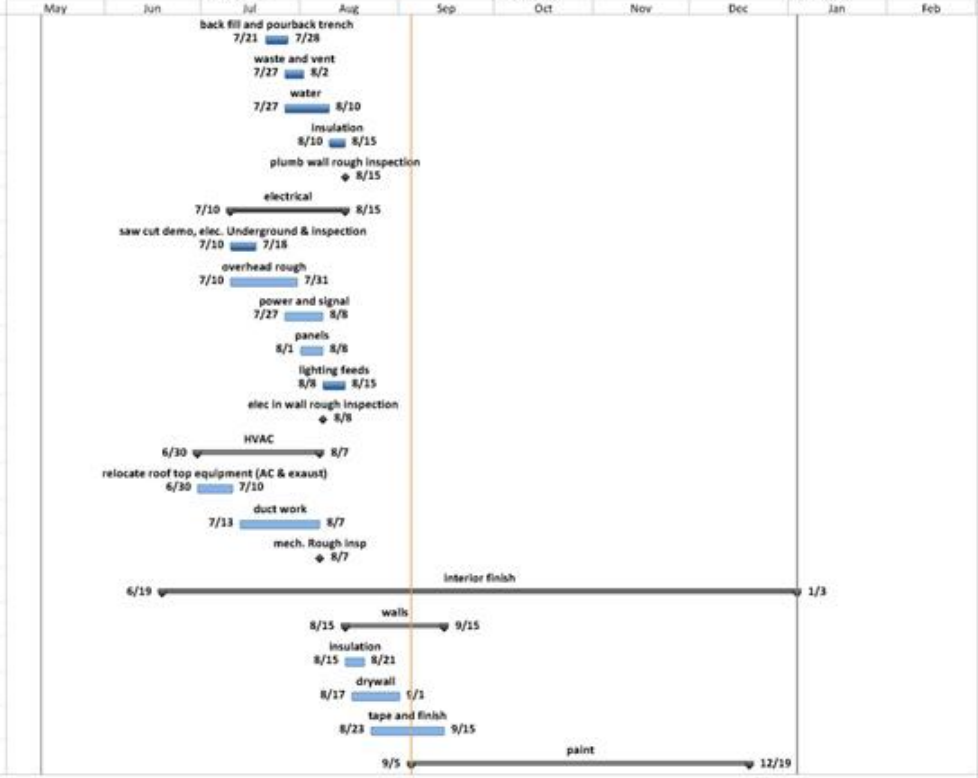
Exhibit "A"
3

By: Larry Stewardson

Cytori Construction Schedule

Job # 17-074
Pg. 2

ID	Task Name	Duration	Start
23	back fill and pourback trench	5 days	Fri 7/21/17
24	waste and vent	4 days	Thu 7/27/17
25	water	10 days	Thu 7/27/17
26	insulation	3 days	Thu 8/10/17
27	plumb wall rough inspection	0 days	Tue 8/15/17
28	**electrical**	**26 days**	**Mon 7/10/17**
29	saw cut demo, elec. Underground & inspection	6 days	Mon 7/10/17
30	overhead rough	15 days	Mon 7/10/17
31	power and signal	8 days	Thu 7/27/17
32	panels	5 days	Tue 8/1/17
33	lighting feeds	5 days	Tue 8/8/17
34	elec in wall rough inspection	0 days	Tue 8/8/17
35	**HVAC**	**24.1 days**	**Fri 6/30/17**
36	relocate roof top equipment (AC & exaust)	5 days	Fri 6/30/17
37	duct work	17 days	Thu 7/13/17
38	mech. Rough insp	0 days	Mon 8/7/17
39	**interior finish**	**140 days**	**Mon 6/19/17**
40	**walls**	**22 days**	**Tue 8/15/17**
41	insulation	4 days	Tue 8/15/17
42	drywall	11 days	Thu 8/17/17
43	tape and finish	16 days	Wed 8/23/17
44	**paint**	**76 days**	**Tue 9/5/17**



print date: Tue 9/5/17
1:53 PM

BYCOR

File: Cytori Const. Sch-DELAY
Filter: - 100% field opps

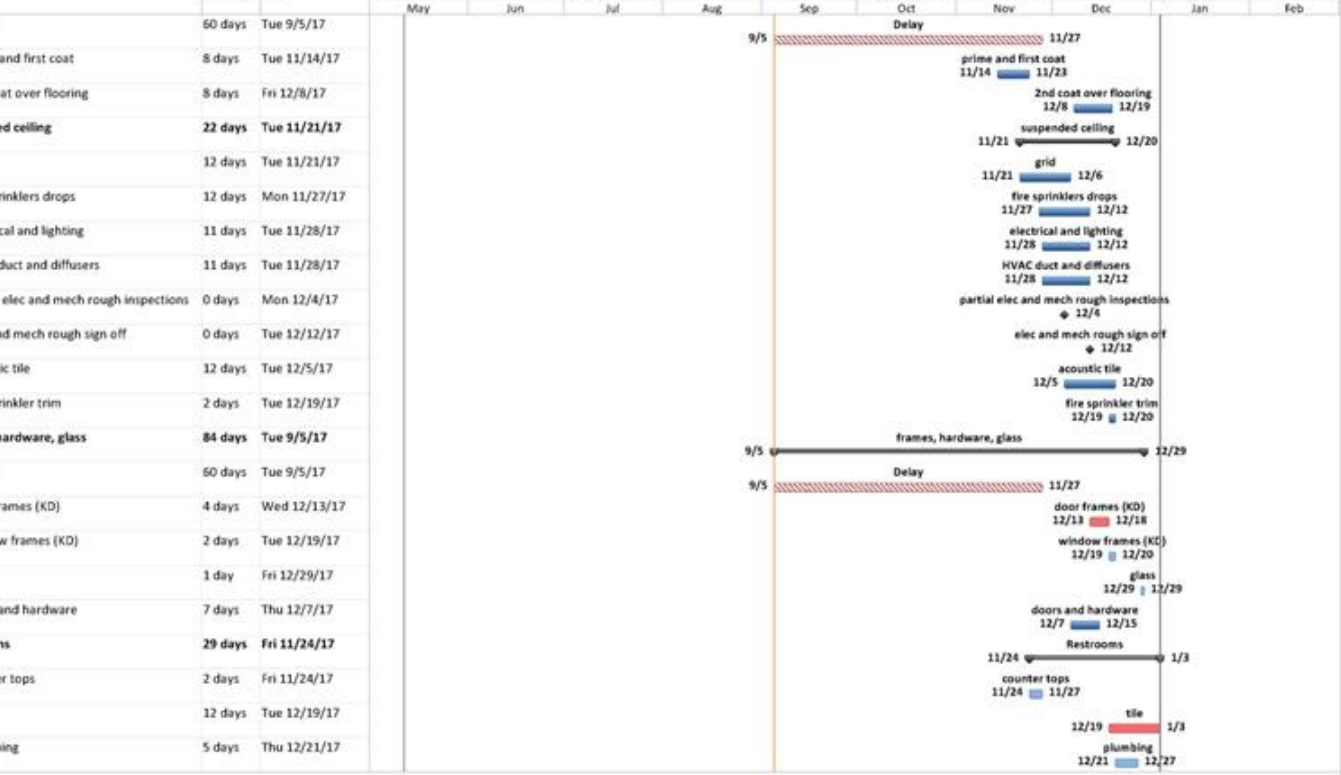
Exhibit "A"
4

By: Larry Stewardson

Cytori Construction Schedule

Job # 17-074
Pg. 3

ID	Task Name	Duration	Start
45	Delay	60 days	Tue 9/5/17
46	prime and first coat	8 days	Tue 11/14/17
47	2nd coat over flooring	8 days	Fri 12/8/17
48	**suspended ceiling**	**22 days**	**Tue 11/21/17**
49	grid	12 days	Tue 11/21/17
50	fire sprinklers drops	12 days	Mon 11/27/17
51	electrical and lighting	11 days	Tue 11/28/17
52	HVAC duct and diffusers	11 days	Tue 11/28/17
53	partial elec and mech rough inspections	0 days	Mon 12/4/17
54	elec and mech rough sign off	0 days	Tue 12/12/17
55	acoustic tile	12 days	Tue 12/5/17
56	fire sprinkler trim	2 days	Tue 12/19/17
57	**frames, hardware, glass**	**84 days**	**Tue 9/5/17**
58	Delay	60 days	Tue 9/5/17
59	door frames (KD)	4 days	Wed 12/13/17
60	window frames (KD)	2 days	Tue 12/19/17
61	glass	1 day	Fri 12/29/17
62	doors and hardware	7 days	Thu 12/7/17
63	**Restrooms**	**29 days**	**Fri 11/24/17**
64	counter tops	2 days	Fri 11/24/17
65	tile	12 days	Tue 12/19/17
66	plumbing	5 days	Thu 12/21/17



print date: Tue 9/5/17
1:53 PM

BYCOR

File: Cytori Const. Sch-DELAY
Filter: - 100% field opps

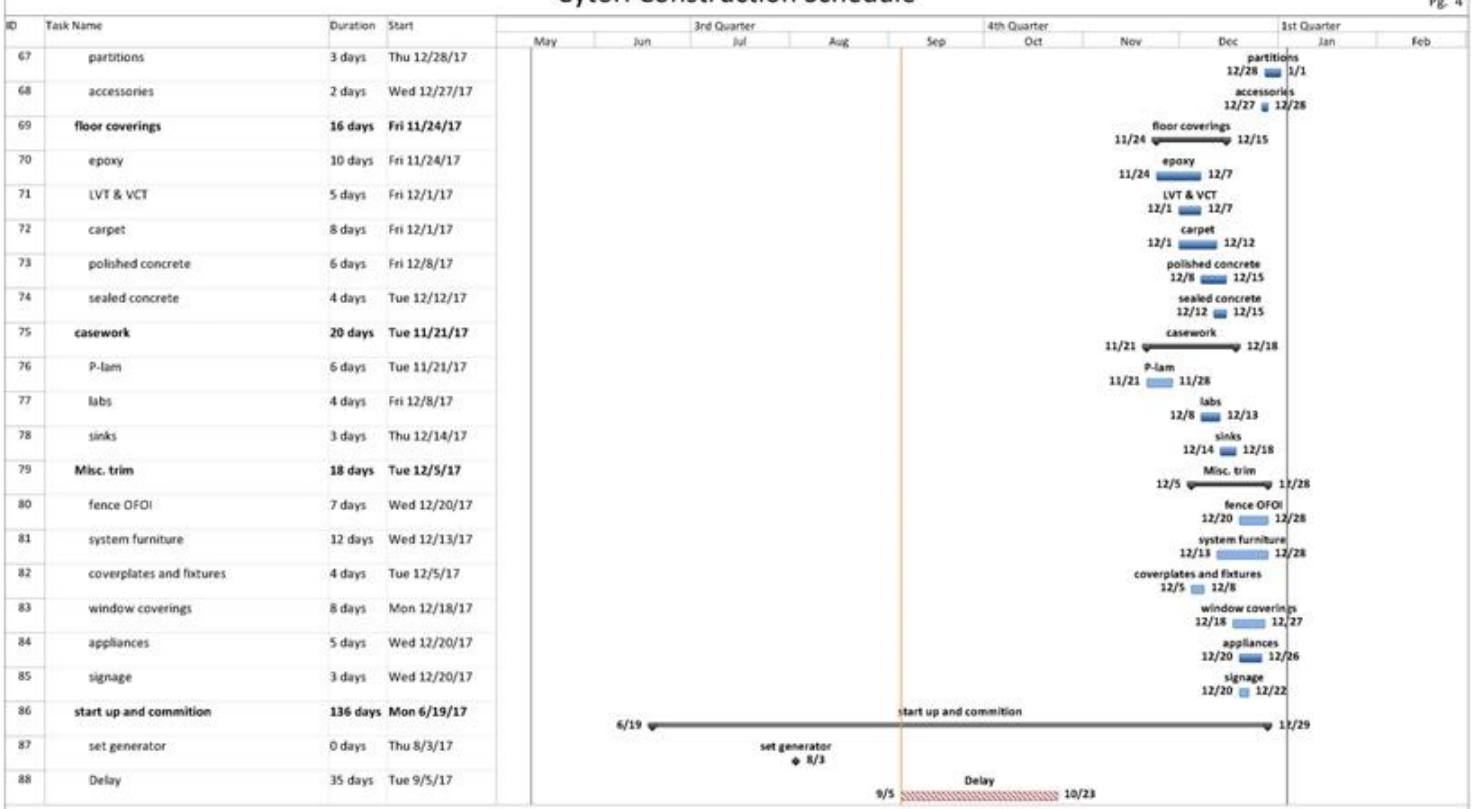
Exhibit "A"
5

By: Larry Stewardson

Cytori Construction Schedule

Job # 17-074
Pg. 4

ID	Task Name	Duration	Start
67	partitions	3 days	Thu 12/28/17
68	accessories	2 days	Wed 12/27/17
69	**floor coverings**	**16 days**	**Fri 11/24/17**
70	epoxy	10 days	Fri 11/24/17
71	LVT & VCT	5 days	Fri 12/1/17
72	carpet	8 days	Fri 12/1/17
73	polished concrete	6 days	Fri 12/8/17
74	sealed concrete	4 days	Tue 12/12/17
75	**casework**	**20 days**	**Tue 11/21/17**
76	P-lam	6 days	Tue 11/21/17
77	labs	4 days	Fri 12/8/17
78	sinks	3 days	Thu 12/14/17
79	**Misc. trim**	**18 days**	**Tue 12/5/17**
80	fence OFOI	7 days	Wed 12/20/17
81	system furniture	12 days	Wed 12/13/17
82	coverplates and fixtures	4 days	Tue 12/5/17
83	window coverings	8 days	Mon 12/18/17
84	appliances	5 days	Wed 12/20/17
85	signage	3 days	Wed 12/20/17
86	**start up and commition**	**136 days**	**Mon 6/19/17**
87	set generator	0 days	Thu 8/3/17
88	Delay	35 days	Tue 9/5/17



print date: Tue 9/5/17
1:53 PM

BYCOR GENERAL CONSTRUCTION

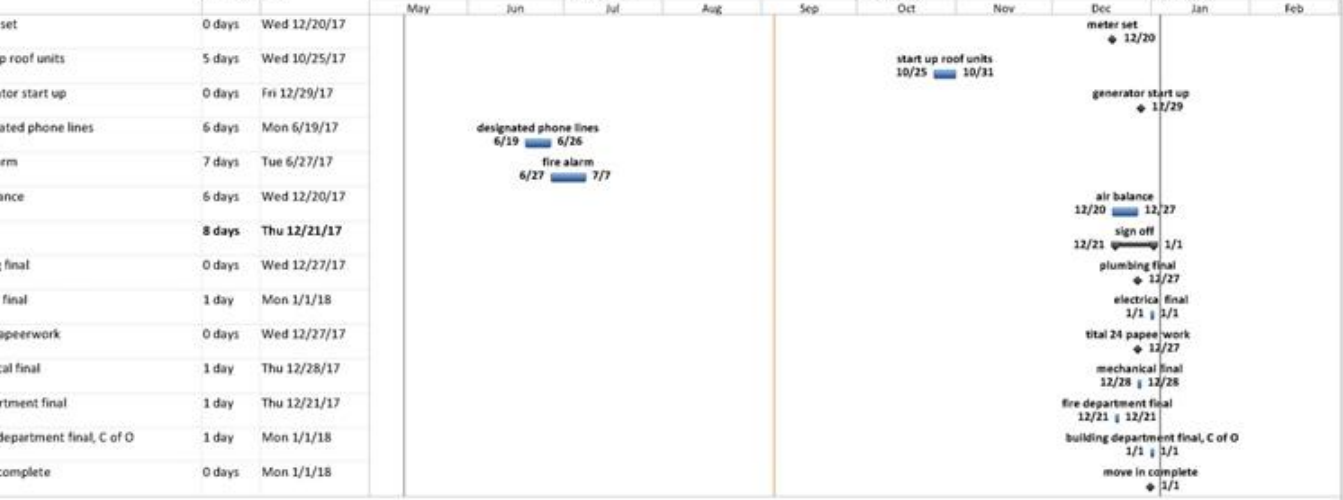
File: Cytori Const. Sch-DELAY
Filter: - 100% field opps

By: Larry Stewardson

Cytori Construction Schedule

Job # 17-074
Pg. 5

ID	Task Name	Duration	Start
89	meter set	0 days	Wed 12/20/17
90	start up roof units	5 days	Wed 10/25/17
91	generator start up	0 days	Fri 12/29/17
92	designated phone lines	6 days	Mon 6/19/17
93	fire alarm	7 days	Tue 6/27/17
94	air balance	6 days	Wed 12/20/17
95	**sign off**	**8 days**	**Thu 12/21/17**
96	plumbing final	0 days	Wed 12/27/17
97	electrical final	1 day	Mon 1/1/18
98	tital 24 papeerwork	0 days	Wed 12/27/17
99	mechanical final	1 day	Thu 12/28/17
100	fire department final	1 day	Thu 12/21/17
101	building department final, C of O	1 day	Mon 1/1/18
102	move in complete	0 days	Mon 1/1/18



print date: Tue 9/5/17
1:53 PM

BYCOR

File: Cytori Const. Sch-DELAY
Filter: - 100% field opps

Exhibit "A"
6

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Cytori Therapeutics, Inc.
San Diego, California

We hereby consent to the incorporation by reference in the Registration Statements on Form S-1 (No. 333-215365 and 333-219967), Form S-3 (Nos. 333-153233, 333-159912, 333-192409, 333-200090, 333-195846, 333-216947 and 333-217988) and Form S-8 (Nos. 333-210211, 333-202858, 333-181764, 333-82074, and 333-122691) of Cytori Therapeutics, Inc. (the "Company") of our report dated March 9, 2018, relating to the 2017 consolidated financial statements and financial statement schedule, which appears in this Form 10-K. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP

San Diego, California
March 9, 2018

EXHIBIT 31.1

Certification of Principal Executive Officer Pursuant to
Securities Exchange Act Rule 13a-14(a)
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Marc H. Hedrick, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cytori Therapeutics, 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(s) 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(s) 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 9, 2018
/s/ Marc H. Hedrick, MD
Marc. H. Hedrick,
President & Chief Executive Officer

EXHIBIT 31.2

Certification of Principal Financial Officer Pursuant to
Securities Exchange Act Rule 13a-14(a)
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Tiago M. Girão, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cytori Therapeutics, 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(s) 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(s) 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 9, 2018
/s/ Tiago M. Girão
Tiago M. Girão,
VP of Finance and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350/ SECURITIES EXCHANGE ACT RULE 13a-14(b), AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES – OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Cytori Therapeutics, Inc. for the year ended December 31, 2017 as filed with the Securities and Exchange Commission on March 9, 2018, (the "Report"), Marc H. Hedrick, as President & Chief Executive Officer of Cytori Therapeutics, Inc., and Tiago Girão, as VP of Finance and Chief Financial Officer of Cytori Therapeutics, Inc., each hereby certifies, respectively, that:

1. The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934.

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Cytori Therapeutics, Inc.

By: /s/ Marc H. Hedrick, MD
Marc H. Hedrick, MD
President & Chief Executive Officer

Dated: March 9, 2018

By: /s/ Tiago M. Girão
Tiago M. Girão
VP of Finance and Chief Financial Officer

Dated: March 9, 2018