# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## **FORM 10-K**

(Mark One)	
[X] ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES	EXCHANGE ACT OF 1934
FOR THE FISCAL YEAR E	NDED DECEMBER 31, 2016
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE S	ECURITIES EXCHANGE ACT OF 1934
FOR THE TRANSITION PERIOD FI	ROMTO
Commission File	e Number <u>0-54402</u>
	E THERAPIES, INC.  as specified in its charter)
<u>Delaware</u>	<u>91-1835664</u>
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
40 Marcus Drive, Melville, New York	11747
(Address of principal executive offices)	(Zip Code)
\ <u></u>	60-8100 umber, including area code)
Securities registered pursuan	nt to Section 12(b) of the Act:
Title of each class None	Name of each exchange on which registered Not applicable
Common Stock, par	nt to Section 12(g) of the Act:  value \$0.001 per share  of Class)
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in R	tule 405 of the Securities Act. Yes [ ] No [X]
Indicate by check mark if the registrant is not required to file reports pursuant to Section	1 13 or Section 15(d) of the Exchange Act. Yes [ ] No [X]
Indicate by check mark whether the registrant (1) has filed all reports required to be file months (or for such shorter period that the registrant was required to file such reports), a	ed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]
	on its corporate Web site, if any, every Interactive Data File required to be submitted and such shorter period that the registrant was required to submit and post such files). Yes [X]
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation knowledge, in definitive proxy or information statements incorporated by reference in F	alation S-K is not contained herein, and will not be contained, to the best of registrant's 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 accelerate "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 1	ted filer, a non-accelerated filer, or a smaller reporting company. See the definitions of 12b-2 of the Exchange Act. (Check one):
Large accelerated filer [ ]	Accelerated filer [ ]
Non-accelerated [ ] (Do not check if a smaller reporting company)	Smaller reporting company [X]
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12	b-2 of the Exchange Act). Yes [ ] No [X]

DOCUMENTS INCORPORATED BY REFERENCE

As of June 30, 2016, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$9,795,332 based on the closing sale price as

reported on the OTCQB market. As of March 15, 2017, there were 5,276,027 shares of common stock outstanding.

None

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## PART I

## **Forward-Looking Statements**

This Annual Report contains forward-looking statements as that term is defined in the federal securities laws. The events described in forward-looking statements contained in this Annual Report may not occur. Generally these statements relate to business plans or strategies, projected or anticipated benefits or other consequences of our plans or strategies, projected or anticipated benefits from acquisitions to be made by us, or projections involving anticipated revenues, earnings or other aspects of our operating results. The words "may," "will," "expect," "believe," "anticipate," "project," "plan," "intend," "estimate," and "continue," and their opposites and similar expressions are intended to identify forward-looking statements. We caution you that these statements are not guarantees of future performance or events and are subject to a number of uncertainties, risks and other influences, many of which are beyond our control, that may influence the accuracy of the statements and the projections upon which the statements are based. Factors which may affect our results include, but are not limited to, the risks and uncertainties discussed in Item 7 of this Annual Report under "Factors That May Affect Future Results and Financial Condition".

Any one or more of these uncertainties, risks and other influences could materially affect our results of operations and whether forward-looking statements made by us ultimately prove to be accurate. Our actual results, performance and achievements could differ materially from those expressed or implied in these forward-looking statements. We undertake no obligation to publicly update or revise any forward-looking statements, whether from new information, future events or otherwise.

#### **Intellectual Property**

This Annual Report includes references to our federally registered trademarks, *BioRestorative Therapies*, the *Dragonfly Logo*, *brtxDISC*, *ThermoStem*, *Stem Cellutrition*, *Stem Pearls* and *Stem the Tides of Time*. The Dragonfly Logo is also registered with the U.S. Copyright Office. This Annual Report also includes references to trademarks, trade names and service marks that are the property of other organizations. Solely for convenience, trademarks and trade names referred to in this Annual Report appear without the ®, SM or TM symbols, and copyrighted content appears without the use of the symbol ©, but the absence of use of these symbols does not reflect upon the validity or enforceability of the intellectual property owned by us or third parties.

## ITEM 1. BUSINESS.

## (a) Business Development

As used in this Annual Report on Form 10-K (the "Annual Report"), references to the "Company", "we", "us", or "our" refer to BioRestorative Therapies, Inc. and its subsidiaries.

We were incorporated in Nevada on June 13, 1997. On August 15, 2011, we changed our name from "Stem Cell Assurance, Inc." to "BioRestorative Therapies, Inc." Effective January 1, 2015, we reincorporated in Delaware.

During the year ended December 31, 2016, we raised an aggregate of \$3,711,236 in connection with sales of common stock and warrants and from the exercise of warrants, and an aggregate of \$1,345,470 in net debt financing. As of December 31, 2016, our outstanding debt of \$2,336,565, together with interest at rates ranging between 0% and 15% per annum, was due through October 2017. Subsequent to December 31, 2016 and through March 15, 2017, we have received aggregate equity proceeds (including proceeds received from the exercise of common stock purchase warrants) and debt proceeds of \$945,000 and \$200,000, respectively, debt and accrued interest of \$325,000 and \$9,679, respectively, has been converted into or exchanged for common stock, \$89,000 of debt and net short-term advances have been repaid and the due date for the repayment of \$322,000 of debt has been extended through April 2017. Giving effect to the above actions, we currently have notes payable aggregating \$427,500 which are past due.

In February 2016, Robert B. Catell joined our Board of Directors. See Item 10 ("Directors, Executive Officers and Corporate Governance").

Between March 2016 and September 2016, we sold to John M. Desmarais, one of our directors and principal stockholders, an aggregate of 330,000 shares of our common stock at an aggregate purchase price of \$1,240,000. In June 2016, we borrowed \$500,000 from a trust for which Mr. Desmarais serves as a trustee and which was established for the benefit of his immediate family. See Item 10 ("Directors, Executive Officers and Corporate Governance") and Item 13 ("Certain Relationship and Related Transactions, and Director Independence").

In January 2017, we announced that we had submitted an investigational new drug, or an IND, application to the U.S. Food and Drug Administration, or the FDA, to obtain clearance to commence a Phase 2 clinical trial using our lead cell therapy candidate, *BRTX-100*, to treat chronic lower back pain due to degenerative disc disease related to protruding/bulging discs. In February 2017, we received such clearance from the FDA.

## (b) Business

## General

We develop therapeutic products and medical therapies using cell and tissue protocols, primarily involving adult (non-embryonic) stem cells. Our two core programs, as described below, relate to the treatment of disc/spine disease and metabolic disorders:

- Disc/Spine Program (brtxDisc). Our lead cell therapy candidate, BRTX-100, is a product formulated from autologous (or a person's own) cultured mesenchymal stem cells, or MSCs, collected from the patient's bone marrow. We intend that the product will be used for the non-surgical treatment of protruding and bulging lumbar discs in patients suffering from chronic lumbar disc disease. The BRTX-100 production process involves collecting bone marrow from a patient, isolating and culturing stem cells from the bone marrow and cryopreserving the cells. In an outpatient procedure, BRTX-100 is to be injected by a physician into the patient's damaged disc. The treatment is intended for patients whose pain has not been alleviated by non-surgical procedures or conservative therapies and who potentially face the prospect of surgery. In January 2017, we submitted an IND application to the FDA to obtain clearance to commence a Phase 2 clinical trial using our lead cell therapy candidate, BRTX-100, to treat chronic lower back pain due to degenerative disc disease related to protruding/bulging discs. In February 2017, we received such clearance from the FDA. We intend to commence such clinical trial during the fourth quarter of 2017. See "Disc/Spine Program" below.
- Metabolic Program (ThermoStem). We are developing a cell-based therapy to target obesity and metabolic disorders using brown adipose (fat) derived stem cells, or BADSC, to generate brown adipose tissue, or BAT. We refer to this as our ThermoStem Program. BAT is intended to mimic naturally occurring brown adipose depots that regulate metabolic homeostasis in humans. Initial preclinical research indicates that increased amounts of brown fat in the body may be responsible for additional caloric burning, as well as reduced glucose and lipid levels. Researchers have found that people with higher levels of brown fat may have a reduced risk for obesity and diabetes. In March 2014, we entered into a Research Agreement with Pfizer, Inc., a global pharmaceutical company, pursuant to which we were engaged to provide research and development services with regard to a joint study of the development and validation of a human brown adipose (fat) cell model. A United States patent related to the ThermoStem Program issued in September 2015. See "Metabolic Brown Adipose (Fat) Program" below.

We have also licensed a curved needle device designed to deliver cells and/or other therapeutic products or material to the spine and discs. In August 2015, a United States patent for this device was issued to the licensor, Regenerative Sciences, LLC. See "Curved Needle Device" below.

In addition, we have developed a human cellular extract that has been demonstrated in *in vitro* skin studies to increase the production of collagen and fibronectin, which are proteins that are essential to combating the aging of skin. We also offer plant stem cell-based facial creams and beauty products under the *Stem Pearls* brand. See "Cosmetic Products" below.

## Overview

Every human being has stem cells in his or her body. These cells exist from the early stages of human development until the end of a person's life. Throughout our lives, our body continues to produce stem cells that regenerate to produce differentiated cells that make up various aspects of the body such as skin, blood, muscle and nerves. These are generally referred to as adult (non-embryonic) stem cells. These cells are important for the purpose of medical therapies aiming to replace lost or damaged cells or tissues or to otherwise treat disorders.

Regenerative cell therapy relies on replacing diseased, damaged or dysfunctional cells with healthy, functioning ones or repairing damaged or diseased tissue. A great range of cells can serve in cell therapy, including cells found in peripheral and umbilical cord blood, bone marrow and adipose (fat) tissue. Physicians have been using adult stem cells from bone marrow to treat various blood cancers for 60 years (the first successful bone marrow transplant was performed in 1956). Recently, physicians have begun to use stem cells to treat various other diseases. We intend to develop cell and tissue products and regenerative therapy protocols, primarily involving adult stem cells, to allow patients to undergo cellular-based treatments.

We intend to concentrate initially on therapeutic areas in which risk to the patient is low, recovery is relatively easy, results can be demonstrated through sufficient clinical data, and patients and physicians will be comfortable with the procedure. We believe that there will be readily identifiable groups of patients who will benefit from these procedures.

Accordingly, we have focused our initial efforts in offering cellular-based therapeutic products and treatment programs in selective areas of medicine for which the treatment protocol is minimally invasive. Such areas include the treatment of the disc and spine and metabolic-related disorders. We will seek to obtain third party reimbursement for our products and procedures; however, patients may be required to pay for our products and procedures out of pocket in full and without the ability to be reimbursed by any governmental and other third party payers.

We have obtained a patent, as well as licenses, for the exclusive use of a patent and a patent pending and have undertaken research and development efforts in connection with the development of therapeutic products and medical therapies using cell and tissue protocols, primarily involving adult stem cells. See "Disc/Spine Program", "Metabolic Brown Adipose (Fat) Program" and "Curved Needle Device" below.

We have developed a human adult stem cell-derived extract that, when applied to human skin cells, significantly increases the production of collagen and fibronectin, which are proteins that are essential to combating the aging of skin. We also offer plant stem cell derived facial creams and beauty products under the *Stem Pearls* brand. See "Cosmetic Products" below.

We have established a laboratory facility and will seek to further develop cellular-based treatments, products and protocols, stem cell-related intellectual property, or IP, and translational research applications. See "Laboratory" below.

We have not generated any significant revenues from our operations. The implementation of our business plan, as discussed below, will require the receipt of sufficient equity and/or debt financing to purchase necessary equipment, technology and materials, fund our research and development efforts, retire our outstanding debt (see Item 7 – "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources – Availability of Additional Funds") and otherwise fund our operations. We intend to seek such financing from current shareholders and debtholders as well as from other accredited investors. We also intend to seek to raise capital through investment bankers and from biotech funds, strategic partners and other financial institutions. We anticipate that we will require between \$8,000,000 and \$10,000,000 in financing to commence and complete a Phase 2 clinical trial and we will require between \$20,000,000 and \$30,000,000 in further additional funding to complete our clinical trials using BRTX-100, as further discussed in this Item 1 (assuming the receipt of no revenues from operations), repay our outstanding debt (\$2,336,565 as of December 31, 2016) (assuming that no debt is converted into equity) and fund general operations. We will also require a substantial amount of additional funding to implement our other programs discussed in this Item 1. No assurance can be given that the anticipated amounts of required financing or commercially reasonable terms or otherwise. We may also seek to have our debtholders convert all or a portion of their debt into equity. No assurance can be given that we will be able to obtain any required financing or commercially reasonable terms or otherwise. We may also seek to have our debtholders convert all or a portion of their debt into equity. No assurance can be given that we will be able to convert such debt into equity on commercially reasonable terms or otherwise. If we are unable to obtain adequate funding, we may be required

## **Disc/Spine Program**

## General

Among the initiatives that we are currently pursuing is our *Disc/Spine Program*, with our initial product being called *BRTX-100*. We have obtained a license (see "License" below) that permits us to use technology for adult stem cell treatment of disc and spine conditions, including protruding and bulging discs. The technology is an advanced stem cell culture and injection procedure into the intervertebral disc, or IVD, that may offer relief from lower back pain, buttock and leg pain, and numbness and tingling in the legs and feet.

Lower back pain is the most common, most disabling, and most costly musculoskeletal ailment faced worldwide. According to a recent market report, there are nearly 25 million people in the United States with chronic lower back pain of which approximately 5 million have pain caused by a protruding or bulging disc. We believe that between 500,000 and 1 million of these back pain sufferers will have an invasive surgical procedure to try to alleviate the pain associated with these lower back conditions. Clinical studies have documented that the source of the pain is most frequently damage to the IVD. This can occur when forces, whether a single load or repetitive microtrauma, exceed the IVD's inherent capacity to resist those loads. Aging, obesity, smoking, lifestyle, and certain genetic factors may predispose one to an IVD injury.

While once thought to be benign, the natural history of lower back pain is often one of chronic recurrent episodes of pain leading to progressive disability. This is believed to be a direct result of the IVD's poor healing capacity after injury. The IVD is the largest avascular (having few or no blood vessels) structure in the body and is low in cellularity. Therefore, its inherent capacity to heal after injury is poor. The clinical rationale of *BRTX-100* is to deliver a high concentration of the patient's own MSCs into the site of pathology to promote healing and relieve pain.

We have developed a mesenchymal stem cell product, BRTX-100, derived from autologous (or a person's own) human bone marrow, cultured and formulated to be delivered into a protruding or bulging disc.

In January 2017, we announced that we had submitted an IND application to the FDA to obtain clearance to commence a Phase 2 clinical trial using our lead cell therapy candidate, *BRTX-100*, to treat chronic lower back pain due to degenerative disc disease related to protruding/bulging discs. In February 2017, we received such clearance from the FDA. We intend to commence such clinical trial during the fourth quarter of 2017.

In addition to developing *BRTX-100*, we may also seek to sublicense the technology to third parties for use in connection with cellular-based treatment programs with regard to disc and spine related conditions.

We have established a laboratory, which includes a clean room facility, to perform the production of cell products (including *BRTX-100*) for use in our clinical trials. We intend to certify the operation of the cleanroom by the third quarter of 2017. This capability may also enable us to develop our pipeline of future products and expand our stem cell-related IP. See "Laboratory" and "Technology; Research and Development" below.

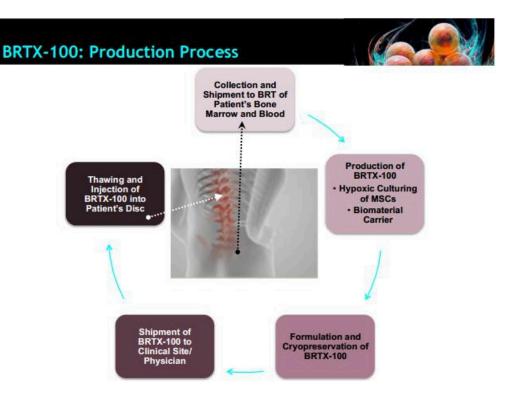
BRTX-100

Our lead therapeutic product, *BRTX-100*, is an autologous hypoxic (low oxygen) cultured mesenchymal stem cell product derived from a patient's bone marrow and formulated with a proprietary carrier. The cryopreserved sterile cellular product will be provided to the clinician in vials for injection into damaged lumbar discs. The therapeutic delivery of *BRTX-100*, in treatment of chronic lumbar disc disease, is performed using a standard 20 gauge 3.5 inch introducer needle and a 25 gauge 6 inch needle that extends into the disc region where the product is delivered. Specific medical practitioners will be provided training using the product with regard to the injection procedure. It is anticipated that the treatment and delivery of the product will be a 30 minute outpatient procedure.

MSCs used in *BRTX-100* are similar to other MSCs under development by others; however, in order to enhance the survivability of our bone marrow-derived MSCs in the avascular environment of the damaged disc, *BRTX-100* is expanded under hypoxic conditions for a period of approximately three weeks. This process results in a cell population with enhanced viability and therapeutic potential following injection locally into injured spinal discs. Publications and scientific literature have indicated that MSCs preconditioned in hypoxic environment show enhanced skeletal muscle regeneration, improved blood flow and vascular formation compared to MSCs cultured under normoxic (normal oxygen) conditions.

Production and Delivery

The production of *BRTX-100* begins with the physician collecting bone marrow from the patient under a local anesthesia. Peripheral blood is also collected from the patient. The physician will then send the patient's bone marrow and blood samples to our laboratory (or a contract laboratory) for culturing and formulation. The hypoxic culturing process applied is intended to result in the selection of a cell population that is suitable for an improved possibility of survival in the internal disc environment. The cell culturing process and product formulation will take approximately three weeks, with an additional two weeks required for quality control testing required to meet product release criteria. We will then send the therapeutic cryopreserved stem cells (*BRTX-100*) in a sterile vial back to the physician's offices where it will be thawed prior to the procedure. The price structure for the procedure and our services has not been determined and no assurances can be given in this regard. The following illustrates the process.



#### License

Pursuant to our license agreement with Regenerative Sciences, LLC, or Regenerative, that became effective in April 2012, we have obtained, among other things, a worldwide (excluding Asia and Argentina), exclusive, royalty-bearing license from Regenerative to utilize or sublicense a certain method for culturing cells for use in treating, among other things, disc and spine conditions, including protruding and bulging discs. The technology that has been licensed is an advanced stem cell culture and injection procedure that may offer relief from lower back pain, buttock and leg pain, and numbness and tingling in the legs and feet. Pursuant to the license agreement, we have also obtained a worldwide, exclusive, royalty-bearing license from Regenerative to utilize or sublicense a certain curved needle device for the administration of specific cells and/or cell products to the disc and/or spine (and other parts of the body). It will be necessary to advance the design of this medical device to facilitate the delivery of substances, including living cells, to specific locations within the body and minimize the potential for damage to nearby structures.

The license agreement provides for the requirement that we achieve certain milestones or pay certain minimum royalty amounts in order to maintain the exclusive nature of the licenses. The license agreement also provides for a royalty-bearing sublicense of certain of the technology to Regenerative for use for certain purposes, including in the United States and the Cayman Islands. Further, the license agreement requires that Regenerative furnish certain training, assistance and consultation services with regard to the licensed technology.

Animal Study

The efficacy and safety of *BRTX-100* has been tested in a degenerative intervertebral rabbit disc model. In this study, 80 rabbits underwent surgery to create a puncture in the discs. Four weeks post surgery, each rabbit had either contrast, a biomaterial carrier or *BRTX-100* injected into the discs. In order to study the biodistribution and efficacy of *BRTX-100*, the rabbits were evaluated at day 56 and day 120.

The key safety findings of the animal study are as follows:

- There was no evidence or observation of gross toxicity related to the administration of *BRTX-100* at either time point. The clinical pathology across both groups and time points were within expected normal historical ranges and under the conditions of the test. No abnormalities (including fractures or overt signs of lumbar disc disease) were identified after review of the radiographic images taken at both endpoints for both groups. No toxicity or adverse finding was evident in the systemic tissues or the discs of animals receiving *BRTX-100*.
- There was no detectable presence of human cells (*BRTX-100*) observed at the day 56 interim time point. This is consistent with the proposed mechanism of action that *BRTX-100* acts through a paracrine effect of secreted growth and immunomodulation factors.

The key efficacy findings of the animal study are as follows:

- BRTX-100 showed a statistically significant DHI (disc height increase) over the control group at day 120.
- BRTX-100 showed a statistically significant improvement in disc histology over the control group at day 120 as graded by a validated histology scale. BRTX-100 showed a significant improvement in the cellularity and matrix of the disc when compared to the control at day 120.

Clinical Trial

In December 2014, we held a pre-IND meeting with the FDA's Office of Cellular Tissue and Gene Therapies within the FDA's Center for Biologics, Evaluation and Research. At the meeting, representatives of the FDA commented on our plans for an IND submission and a clinical trial with regard to the disc program. The FDA representatives identified certain necessary pre-clinical research and data as well as various suggestions to modify the clinical trial design. We believe that these comments and suggestions will not materially impact our plans for a clinical trial. In January 2017, we announced that we had submitted an IND application to the FDA to obtain clearance to commence a Phase 2 clinical trial using our lead cell therapy candidate, *BRTX-100*, to treat chronic lower back pain due to degenerative disc disease related to protruding/bulging discs. In February 2017, we received such clearance from the FDA. We intend to commence such clinical trial during the fourth quarter of 2017. One of the principal investigators for our clinical trial is intended to be Dr. Gregory E. Lutz, our Chief Medical Advisor for Spine Medicine. See Item 10 ("Directors, Executive Officers and Corporate Governance-Scientific Advisors").

The following describes the Phase 2 clinical trial cleared by the FDA:

A Phase 2 Prospective, Double-Blinded, Placebo Controlled, Randomized Study

- General
  - 72 patients; randomized 2:1, BRTX-100 to control
  - 10-20 clinical trial sites
  - Primary efficacy endpoint at 6 months
  - Patient follow up at 12 and 24 months
- Primary Efficacy Endpoint
  - Responder endpoint % of patients that meet the improvement in function and reduction in pain threshold
  - Improvement in function defined as at least a 30% increase in function based on the Oswestry questionnaires (ODI)
  - Reduction of pain defined as at least a 30% decrease in pain as measured using the Visual Analogue Scale (VAS)
- Additional or Secondary Endpoints
  - Quality of life assessment
  - Evolution of affected disc(s) by magnetic resonance imaging (MRI)

The FDA approval process can be lengthy, expensive and uncertain and there is no guarantee that the clinical trial(s) will be commenced or completed or that the product will ultimately receive approval or clearance. See "Government Regulation" below and Item 7 ("Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors That May Affect Future Results and Financial Condition – Risks Related to Our Cell Therapy Product Development Efforts; and – Risks Related to Government Regulation").

## Metabolic Brown Adipose (Fat) Program

Since June 2011, we have been engaging in pre-clinical research efforts with respect to a platform technology utilizing brown adipose (fat) derived stem cells for therapeutic purposes. We have labeled this initiative our *ThermoStem Program*.

Brown fat is a specialized adipose (fat) tissue found in the human body that plays a key role in the evolutionarily conserved mechanisms underlying thermogenesis (generation of non-shivering body heat) and energy homeostasis in mammals - long known to be present at high levels in hibernating mammals and human newborns. Recent studies have demonstrated that brown fat is present in the adult human body and may be correlated with the maintenance and regulation of healthy metabolism, thus potentially being involved in caloric regulation. The pre-clinical *ThermoStem Program* involves the use of a cell-based (brown adipose tissue) treatment for metabolic disease, such as type 2 diabetes, obesity, hypertension and other metabolic disorders and cardiac deficiencies. We have had initial success in transplanting the tissue in animals, and we are currently exploring ways to deliver the brown fat tissue into humans. Even though present, BAT mass is very low in healthy adults and even lower in obese populations. Therefore, it may not be sufficient to either naturally impact whole body metabolism, or to be targeted by drugs intended to increase its activity in the majority of the population. Increasing BAT mass is crucial in order to benefit from its metabolic activity and this is what our *ThermoStem Program* seeks to accomplish. We may also identify other naturally occurring and chemically engineered molecules that may enhance brown adipose tissue performance.

Obesity, the abnormal accumulation of white fat tissue, leads to a number of metabolic disorders and is the driving force behind the rise of type 2 diabetes and cardiovascular diseases worldwide. Pharmacological efforts to alter metabolic homeostasis through modulating central control of appetite and satiety have had limited market penetration due to significant psychological and physiological safety concerns directly attributed to modulating these brain centers. Adipose tissue is one of the largest organs in the human body and plays a key role in central energy balance and lipid homeostasis. Two types of adipose tissues are found in mammals, white and brown adipose tissues. White adipose tissue function is to store energy, whereas BAT specializes in energy expenditure. Recent advancements in unraveling the mechanisms that control the induction, differentiation, proliferation, and thermogenic activity of BAT, along with the application of imaging technologies for human BAT visualization, have generated optimism that these advances may provide novel strategies for targeting BAT activation/thermogenesis, leading to efficacious and safe obesity targeted therapies.

We are developing a cell-based therapy to target obesity and metabolic disorders using BADSC. Our goal is to develop a bioengineered implantable brown adipose tissue intended to mimic ones naturally occurring in the human body. We have isolated and characterized a human multipotent stem cell population that resides within BAT depots. We have expanded these stem cells to clinically relevant numbers and successfully differentiated them into functional brown adipocytes. We intend to use adult stem cells that may be differentiated into progenitor or fully differentiated brown adipocytes, or a related cell type, which can be used therapeutically in patients. We are focusing on the development of treatment protocols that utilize allogeneic cells (i.e., stem cells from a genetically similar but not identical donor).

In order to deliver these differentiated cells into target locations *in vivo*, we seeded BADSC onto 3-dimensional biological scaffolds. Pre-clinical animal models of diet-induced obesity, that were transplanted with differentiated BADSC supported by a biological scaffold, presented significant reductions in weight and blood glucose levels compared to saline injected controls. We are identifying technology for *in vivo* delivery in small animal models. Having completed our proof of concept using our BAT in small animals, we are currently developing our next generation BAT. It is anticipated that this next version will contain a higher purity of BADSC, which is expected to increase the therapeutic effect compared to our first generation product. In addition, we are exploring the delivery of the therapeutic using encapsulation technology, which will only allow for reciprocal exchange of small molecules between the host circulation and the BAT implant. We expect that encapsulation may present several advantages over our current biological scaffolds, including prevention of any immune response or implant rejection that might occur in an immunocompetent host and an increase in safety by preventing the implanted cells from invading the host tissues and forming tumors. We have developed promising data on the transplantation of human stem cell-derived tissue engineered brown fat into an encapsulation device to be used as a cell delivery system for our metabolic platform program for the treatment of type 2 diabetes, obesity, hyperlipidemia and hypertension. This advancement may lead to successful transplantation of brown fat in humans. By successfully seeding human BADSC into an encapsulation device, we are advancing the development of our cell therapy program to treat metabolic disorders. This data is expected to progress our program to enable transplanted brown adipose cells to effectively maintain or regulate normal metabolism in humans. We are evaluating the next generation of BAT constructs that will first be teste

In June 2012, we entered into an Assignment Agreement with the University of Utah Research Foundation, or the Foundation, and a Research Agreement with the University of Utah, or the Utah Research Agreement. Pursuant to the Assignment Agreement, which provides for royalty payments, we acquired the rights to two provisional patent applications that relate to human brown fat cell lines. No royalty amounts are payable to date. The applications have been converted to a utility application in the United States and several foreign jurisdictions. Pursuant to the Utah Research Agreement, the University of Utah, or the University, provided research services relating to the identification of brown fat tissue and the development and characterization of brown fat cell lines. The Utah Research Agreement provides that all inventions, discoveries, patent rights, information, data, methods and techniques, including all cell lines, cell culture media and derivatives thereof, are owned by us.

In February 2014, our research with regard to the identification of a population of brown adipose derived stem cells was published in *Stem Cells*, a respected stem cell journal.

In March 2014, we entered into a Research Agreement with Pfizer Inc, or the Pfizer Research Agreement, a global pharmaceutical company. Pursuant to the Pfizer Research Agreement, we were engaged to provide research and development services with regard to a joint study of the development and validation of a human brown adipose (fat) cell model. The Pfizer Research Agreement provided for an initial payment to us of \$250,000 and the payment of up to an additional \$525,000 during the two-year term of the Agreement, all of which has been received.

In August 2015, we entered into a one year research collaboration agreement with the University of Pennsylvania with regard to the understanding of brown adipose (fat) biology and its role in metabolic disorders. No amounts are payable by or to us pursuant to this agreement.

In September 2015, a United States patent related to the *ThermoStem Program* was issued to us.

Following our research activities, we intend to undertake preclinical studies in order to determine whether our proposed treatment protocol is safe. Such studies are planned to begin by the third quarter of 2017. Following the completion of such studies, if required, we intend to file an IND with the FDA and initiate a clinical trial. See "Government Regulation" below and Item 7 ("Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors That May Affect Future Results and Financial Condition – Risks Related to Our Cell Therapy Product Development Efforts; and – Risks Related to Government Regulation"). The FDA approval process can be lengthy, expensive and uncertain and there is no guarantee of ultimate approval or clearance.

We anticipate that much of our development work in this area will take place at our laboratory facility, outside core facilities at academic, research or medical institutions, or contractors. See "Laboratory" below.

## **Curved Needle Device**

Pursuant to the Regenerative license agreement discussed under "Disc/Spine Program-License" above, we have licensed and further developed a curved needle device, or CND, that is a needle system with a curved inner cannula to allow access to difficult-to-locate regions for the delivery or removal of fluids and other substances. The CND is intended to deliver stem cells and/or other therapeutic products or material to the interior of a human intervertebral disc, the spine region, or potentially other areas of the body. The device relies on the use of pre-curved nested cannulae that allow the cells or material to be deposited in the posterior and lateral aspects of the disc to which direct access is not possible due to outlying structures such as vertebra, spinal cord and spinal nerves. We anticipate that the use of the CND will facilitate the delivery of substances, including living cells, to specific locations within the body and minimize the potential for damage to nearby structures. The device may also have more general use applications. In August 2015, a United States patent for the CND was issued to the licensor, Regenerative Sciences, LLC. We anticipate that FDA approval or clearance will be necessary for the CND prior to commercialization. See "Government Regulation" below and Item 7 ("Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors That May Affect Future Results and Financial Condition – Risks Related to Our Cell Therapy Product Development Efforts; and – Risks Related to Government Regulation"). The FDA review and approval process can be lengthy, expensive and uncertain and there is no guarantee of ultimate approval or clearance.

#### Laboratory

We have established a laboratory in Melville, New York for research purposes and have built a cleanroom within the laboratory for the possible production of cell-based therapies, such as *BRTX-100*, for use in a clinical trial. We intend to certify the operation of the cleanroom by the third quarter of 2017.

As operations grow, our plans include the expansion of our laboratory to perform cellular characterization and culturing, product, protocol and stem cell-related IP development, translational research and therapeutic outcome analysis. As we develop our business and additional stem cell treatments are approved, we will seek to establish ourselves as a key provider of adult stem cells for therapies and expand to provide cells in other market areas for stem cell therapy. We may also use outside laboratories specializing in cell therapy services and manufacturing of cell products.

## Technology; Research and Development

We intend to utilize our laboratory or a third party laboratory in connection with cellular research activities. We also intend to seek to obtain cellular-based therapeutic technology licenses and increase our IP portfolio. We intend to seek to develop potential stem cell delivery systems or devices. The goal of these specialized delivery systems or devices is to deliver cells into specific areas of the body, control the rate, amount and types of cells used in a treatment, and populate these areas of the body with sufficient stem cells so that there is a successful therapeutic result.

We also intend to perform research to develop certain stem cell optimization compounds, media or "recipes" to enhance cellular growth and regeneration for the purpose of improving pre-treatment and post-treatment outcomes.

We have two pending United States patent applications with regard to two patent families. We have been issued a United States patent with regard to one of the two patent families. Patent applications with regard to one patent family have been filed in five foreign jurisdictions (of which one application has become inactive). In addition, a Patent Cooperation Treaty, or PCT, application has been filed with regard to a second patent family and such PCT application has been filed in four foreign jurisdictions. Regenerative has filed two patent applications with regard to the technology that is the subject of the license agreement between us (see "Disc/Spine Program-License" above). Regenerative has been issued a patent with regard to its curved needle therapeutic delivery device. Our patent applications and those of Regenerative are currently in prosecution (i.e., we and Regenerative are seeking issued patents). A description of the patent applications and issued patents is set forth below:

Program	I.D.	Jurisdiction	Title
Disc/Spine	13/132,840*	US	Methods and compositions to facilitate repair of avascular tissue
	U.S. Patent No. 9,113,950 B2**	US	Therapeutic delivery device
Metabolic	U.S. Patent No. 9,133,438	US	Brown fat cell compositions and methods
	13/932,468	US	
	2012275335	Australia	
	12743811.7	Europe	
	230237	Israel	
	2014-519026	Japan	
	14/255,595	US	Human brown adipose derived stem cells and uses
	PCT/US2014/034540	Patent Cooperation Treaty	•
	2014253920	Australia	
	14729769.1	Europe	
	242150	Israel	
	2016-509105	Japan	

<sup>\*</sup>Patent application filed by licensor, Regenerative Sciences, LLC

In March 2014, we entered into a Research and Development Agreement with Rohto Pharmaceutical Co., Ltd., a Japanese pharmaceutical company. Pursuant to the Rohto Research and Development Agreement, we were engaged to provide research and development services with regard to stem cells. The Rohto Research and Development Agreement provided for an initial payment to us of \$150,000 and the payment of up to an additional \$100,000 subject to the satisfaction of certain milestones (all of which has been earned and received). The Rohto Research and Development Agreement expired in June 2015.

In March 2014, we entered into the Pfizer Research Agreement, as discussed above under "Metabolic Brown Adipose (Fat) Program".

<sup>\*\*</sup>Patent issued to licensor, Regenerative Sciences, LLC

We have secured registrations in the U.S. Patent and Trademark Office for the following trademarks:

- disc\*
- THERMOSTEM
- STEM CELLUTRITION
- STEM PEARLS, and
- STEM THE TIDES OF TIME.

We also have federal common law rights in the trademarks, BioRestorative Therapies, BRTX-100, and other trademarks used in the conduct of our business that are not registered.

Our success will depend in large part on our ability to develop and protect our proprietary technology. We intend to rely on a combination of patent, trade secret and know-how, copyright and trademark laws, as well as confidentiality agreements, licensing agreements, non-compete agreements and other agreements, to establish and protect our proprietary rights. Our success will also depend upon our ability to avoid infringing upon the proprietary rights of others, for if we are judicially determined to have infringed such rights, we may be required to pay damages, alter our services, products or processes, obtain licenses or cease certain activities. We conduct prior rights searches before launching any new product or service to put us in the best position to avoid claims of infringement.

During the years ended December 31, 2016 and 2015, we incurred \$2,883,563 and \$2,105,059, respectively, in research and development expenses.

## **Cosmetic Products**

We have developed a human adult stem cell-derived extract that, when applied to human skin cells, significantly increases the production of collagen and fibronectin, which are proteins that are essential to combating the aging of skin. No arrangements with regard to the commercial distribution of products that utilize our extract as a cosmetic ingredient are currently in place or are under consideration.

We offer plant derived stem cell cosmetic products under the *Stem Pearls* brand. We have not commenced marketing efforts or generated any significant revenue with regard to *Stem Pearls* products.

#### Scientific Advisors

We have established a Scientific Advisory Board whose purpose is to provide advice and guidance in connection with scientific matters relating to our business. Our four Scientific Advisory Board members are Dr. Wayne Marasco, Chairman, Dr. Naiyer Imam, Dr. Wayne Olan and Dr. Joy Cavagnaro. In addition, Dr. Gregory Lutz has been retained as our Chief Medical Advisor for Spine Medicine. See Item 10 ("Directors, Executive Officers and Corporate Governance – Scientific Advisors") for a listing of the principal positions for Drs. Marasco, Imam, Olan, Cavagnaro and Lutz.

## Competition

We will compete with many pharmaceutical, biotechnology, and medical device companies, as well as other private and public stem cell companies involved in the development and commercialization of cell-based medical technologies and therapies.

Regenerative medicine is rapidly progressing, in large part through the development of cell-based therapies or devices designed to isolate cells from human tissues. Most efforts involve cell sources, such as bone marrow, adipose tissue, embryonic and fetal tissue, umbilical cord and peripheral blood and skeletal muscle.

Companies working in the area of regenerative medicine with regard to the disc and spine include, among others, Isto Biologics, Harvest Technologies (acquired by Terumo), Celling Biosciences, Mesoblast, Tissue Genesis, Discgenics and Arthrex. Companies that are developing products and therapies to combat obesity, diabetes and other metabolic disorders including through the use of brown fat, include, among others, Pfizer, AstraZeneca, Genentech (acquired by Roche), Eli Lilly, Amgen, Energesis Pharmaceuticals, Sanofi, Novo Nordisk, Johnson & Johnson, Novartis, GlaxoSmithKline, Bristol-Myers Squibb, Mitsubishi Tanabe Pharma, Takeda Pharmaceutical, Vivus, Arena Pharmaceuticals, Teva Pharmaceuticals, Merck, Blu Pharmaceuticals (acquired by PuraCap Pharmaceutical), BioTime, Merz Pharmaceuticals, ViaCyte and Regeneron. Many of our competitors and potential competitors have substantially greater financial, technological, research and development, marketing and personnel resources than we do. We cannot, with any accuracy, forecast when or if these companies are likely to bring their products and therapies to market in competition with those that we are pursuing.

With the enactment of the Biologics Price Competition and Innovation Act of 2009, or BPCIA, an abbreviated pathway for the approval of biosimilar and interchangeable biological products was created. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing reference product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original branded product is approved under a biologics license application, or BLA. Although the FDA has approved several biosimilar products, complex provisions of the law are still being implemented by the FDA and interpreted by the federal courts. As a result, the ultimate impact, implementation, and meaning of the BPCIA are still subject to some uncertainty and FDA actions and court decisions concerning the law could have a material adverse effect on the future commercial prospects for our biological products.

We believe that, if any of our product candidates are approved as a biological product under a BLA, it should qualify for the 12-year period of exclusivity. However, there is a risk that the FDA could permit biosimilar applicants to reference approved biologics other than our therapeutic candidates, thus circumventing our exclusivity and potentially creating the opportunity for competition sooner than anticipated. Additionally, this period of regulatory exclusivity does not apply to companies pursuing regulatory approval via their own traditional BLA, rather than via the abbreviated pathway. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

#### Customers

Our cell and tissue therapeutic products are intended to be marketed to physicians, other health care professionals, hospitals, research institutions, pharmaceutical companies and the military. It is anticipated that physicians who are trained and skilled in performing spinal injections will be the physicians most likely to treat discs with injections of *BRTX-100*. These physicians would include interventional physiatrists (physical medicine physicians), pain management-anesthesiologists, interventional radiologists and neurosurgeons.

## **Governmental Regulation**

#### U.S. Government Regulation

The health care industry is highly regulated in the United States. The federal government, through various departments and agencies, state and local governments, and private third-party accreditation organizations regulate and monitor the health care industry, associated products, and operations. The following is a general overview of the laws and regulations pertaining to our business.

FDA Regulation of Stem Cell Treatment and Products

The FDA regulates the manufacture of human stem cell treatments and associated products under the authority of the Public Health Service Act, or PHSA, and the Federal Food, Drug, and Cosmetic Act, or FDCA. Stem cells can be regulated under FDA's Human Cells, Tissues, and Cellular and Tissue-Based Products Regulations, or HCT/Ps, or may also be subject to FDA's drug, biological product, or medical device regulations, each as discussed below.

Human Cells, Tissues, and Cellular and Tissue-Based Products Regulation

Under Section 361 of the PHSA, the FDA issued specific regulations governing the use of HCT/Ps in humans. Pursuant to Part 1271 of Title 21 of the Code of Federal Regulations, or CFR, the FDA established a unified registration and listing system for establishments that manufacture and process HCT/Ps. The regulations also include provisions pertaining to donor eligibility determinations; current good tissue practices covering all stages of production, including harvesting, processing, manufacture, storage, labeling, packaging, and distribution; and other procedures to prevent the introduction, transmission, and spread of communicable diseases.

The HCT/P regulations strictly constrain the types of products that may be regulated solely under these regulations. Factors considered include the degree of manipulation, whether the product is intended for a homologous function, whether the product has been combined with noncellular or non-tissue components, and the product's effect or dependence on the body's metabolic function. In those instances where cells, tissues, and cellular and tissue-based products have been only minimally manipulated, are intended strictly for homologous use, have not been combined with noncellular or nontissue substances, and do not depend on or have any effect on the body's metabolism, the manufacturer is only required to register with the FDA, submit a list of manufactured products, and adopt and implement procedures for the control of communicable diseases. If one or more of the above factors has been exceeded, the product would be regulated as a drug, biological product, or medical device rather than an HCT/P.

Because we are an enterprise in the early stages of operations and have not generated significant revenues from operations, it is difficult to anticipate the likely regulatory status of the array of products and services that we may offer. We believe that some of the adult autologous (self-derived) stem cells that will be used in our cellular therapy and biobanking products and services, including the brown adipose (fat) tissue that we intend to use in our *ThermoStem Program*, may be regulated by the FDA as HCT/Ps under 21 C.F.R. Part 1271. This regulation defines HCT/Ps as articles "containing or consisting of human cells or tissues that are intended for implantation, transplantation, infusion or transfer into a human recipient." However, the FDA may disagree with this position or conclude that some or all of our stem cell therapy products or services do not meet the applicable definitions and exemptions to the regulation. If we are not regulated solely under the HCT/P provisions, we would need to expend significant resources to comply with the FDA's broad regulatory authority under the FDCA. Third party litigation concerning the autologous use of a stem cell mixture to treat musculoskeletal and spinal injuries has increased the likelihood that some of our products and services are likely to be regulated as a drug or biological product and require FDA approval. In the litigation, the FDA asserted that the defendants' use of cultured stem cells without FDA approval is in violation of the FDCA, claiming that the defendants' product is a drug. The defendants asserted that their procedure is part of the practice of medicine and therefore beyond the FDA's regulatory authority. The District Court ruled in favor of the FDA, and in February 2014 the Circuit Court affirmed the District Court's holding.

If regulated solely under the FDA's HCT/P statutory and regulatory provisions, once our laboratory in the United States becomes operational, it will need to satisfy the following requirements, among others, to process and store stem cells:

- registration and listing of HCT/Ps with the FDA;
- donor eligibility determinations, including donor screening and donor testing requirements;
- current good tissue practices, specifically including requirements for the facilities, environmental controls, equipment, supplies and reagents, recovery of HCT/Ps from the patient, processing, storage, labeling and document controls, and distribution and shipment of the HCT/Ps to the laboratory, storage, or other facility;
- tracking and traceability of HCT/Ps and equipment, supplies, and reagents used in the manufacture of HCT/Ps;
- adverse event reporting;
- FDA inspection; and
- abiding by any FDA order of retention, recall, destruction, and cessation of manufacturing of HCT/Ps.

Non-reproductive HCT/Ps and non-peripheral blood stem/progenitor cells that are offered for import into the United States and regulated solely under Section 361 of the PHSA must also satisfy the requirements under 21 C.F.R. § 1271.420. Section 1271.420 requires that the importer of record of HCT/Ps notify the FDA prior to, or at the time of, importation and provide sufficient information for the FDA to make an admissibility decision. In addition, the importer must hold the HCT/P intact and under conditions necessary to prevent transmission of communicable disease until an admissibility decision is made by the FDA.

If the FDA determines that we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions including public warning letters, fines, consent decrees, orders of retention, recall or destruction of product, orders to cease manufacturing, and criminal prosecution. If any of these events were to occur, it could materially adversely affect us.

To the extent that our cellular therapy activities are limited to developing products and services outside the United States, as described in detail below, the products and services would not be subject to FDA regulation, but will be subject to the applicable requirements of the foreign jurisdiction. We intend to comply with all applicable foreign governmental requirements.

## Drug and Biological Product Regulation

An HCT/P product that does not meet the criteria for being solely regulated under Section 361 of the PHSA will be regulated as a drug, device or biological product under the FDCA and/or Section 351 of the PHSA, and applicable FDA regulations. The FDA has broad regulatory authority over drugs and biologics marketed for sale in the United States. The FDA regulates the research, clinical testing, manufacturing, safety, effectiveness, labeling, storage, recordkeeping, promotion, distribution, and production of drugs and biological products. The FDA also regulates the export of drugs and biological products manufactured in the United States to international markets.

For products that are regulated as drugs, an investigational new drug, or IND, application and an approved new drug application, or NDA, are required before marketing and sale in the United States pursuant to the requirements of 21 C.F.R. Parts 312 and 314, respectively. An IND application notifies the FDA of prospective clinical testing and allows the test product to be shipped in interstate commerce. Approval of a NDA requires a showing that the drug is safe and effective for its intended use and that the methods, facilities, and controls used for the manufacturing, processing, and packaging of the drug are adequate to preserve its identity, strength, quality, and purity. If regulated as a biologic, the product must be subject to an IND to conduct clinical trials and a manufacturer must obtain an approved biologics license application, or BLA, before introducing a product into interstate commerce. To obtain a BLA, a manufacturer must show that the proposed product is safe, pure, and potent and that the facility in which the product is manufactured, processed, packed, or held meets established quality control standards.

Drug and biological products must also comply with applicable registration, product listing, and adverse event reporting requirements as well as FDA's general prohibition against misbranding and adulteration. Additionally, the FDA actively enforces regulations prohibiting marketing and promotion of drugs and biologics for indications or uses that have not been approved by the FDA (i.e., "off label" promotion).

In the event that the FDA does not regulate our services in the United States solely under the HCT/P regulation, our products and activities could be regulated as drug or biological products under the FDCA. If regulated as drug or biological products, we will need to expend significant resources to ensure regulatory compliance. If an IND and NDA or BLA are required for any of our products, there is no assurance as to whether or when we will receive FDA approval of the product. The process of designing, conducting, compiling and submitting the non-clinical and clinical studies required for NDA or BLA approval is time-consuming, expensive and unpredictable. The process can take many years, depending on the product and the FDA's requirements.

If the FDA determines that we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions from public warning letters, fines, injunctions, consent decrees and civil penalties to suspension or delayed issuance of approvals, seizure of our products, total or partial shutdown of our production, withdrawal of approvals, and criminal prosecutions. If any of these events were to occur, it could materially adversely affect us.

## Medical Device Regulation

The FDA also has broad authority over the regulation of medical devices marketed for sale in the United States. The FDA regulates the research, clinical testing, manufacturing, safety, labeling, storage, recordkeeping, premarket clearance or approval, promotion, distribution, and production of medical devices. The FDA also regulates the export of medical devices manufactured in the United States to international markets.

Under the FDCA, medical devices are classified into one of three classes- Class I, Class II, or Class III, depending upon the degree of risk associated with the medical device and the extent of control needed to ensure safety and effectiveness. Class I devices are subject to the lowest degree of regulatory scrutiny because they are considered low risk devices and need only comply with the FDA's General Controls. The General Controls include compliance with the registration, listing, adverse event reporting requirements, and applicable portions of the Quality System Regulation as well as the general misbranding and adulteration prohibitions.

Class II devices are subject to the General Controls as well as certain Special Controls such as 510(k) premarket notification. Class III devices are subject to the highest degree of regulatory scrutiny and typically include life supporting and life sustaining devices and implants. They are subject to the General Controls and Special Controls that include a premarket approval application, or PMA. "New" devices are automatically regulated as Class III devices unless they are shown to be low risk, in which case they may be subject to de novo review to be moved to Class I or Class II. Clinical research of an investigational device is regulated under the investigational device exemption, or IDE, regulations of 21 C.F.R. Part 812. Nonsignificant risk devices are subject to abbreviated requirements that do not require a submission to the FDA but must have Institutional Review Board (IRB) approval and comply with other requirements pertaining to informed consent, labeling, recordkeeping, reporting, and monitoring. Significant risk devices require the submission of an IDE application to the FDA and the FDA's approval of the IDE application.

The FDA premarket clearance and approval process can be lengthy, expensive and uncertain. It generally takes three to twelve months from submission to obtain 510(k) premarket clearance, although it may take longer. Approval of a PMA could take one to four years, or more, from the time the application is submitted and there is no guarantee of ultimate clearance or approval. Securing FDA clearances and approvals may require the submission of extensive clinical data and supporting information to the FDA. 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. In addition, modifications or enhancements of products that could affect the safety or effectiveness or effect a major change in the intended use of a device that was either cleared through the 510(k) process or approved through the PMA process may require further FDA review through new 510(k) or PMA submissions.

In the event we develop processes, products or services which qualify as medical devices subject to FDA regulation, we intend to comply with such regulations. If the FDA determines that our products are regulated as medical devices and we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions from public warning letters, application integrity proceedings, fines, injunctions, consent decrees and civil penalties to suspension or delayed issuance of approvals, seizure of our products, total or partial shutdown of our production, withdrawal of approvals, and criminal prosecutions. If any of these events were to occur, it could materially adversely affect us.

Current Good Manufacturing Practices and other FDA Regulations of Cellular Therapy Products

Products that fall outside of the HCT/P regulations and are regulated as drugs, biological products, or devices must comply with applicable good manufacturing practice regulations. The current Good Manufacturing Practices, or cGMPs regulations for drug products are found in 21 C.F.R. Parts 210 and 211; the General Biological Product Standards for biological products are found in 21 C.F.R. Part 610; and the Quality System Regulation for medical devices are found in 21 C.F.R. Part 820. These cGMPs and quality standards are designed to ensure the products that are processed at a facility meet the FDA's applicable requirements for identity, strength, quality, sterility, purity, and safety. In the event that our domestic United States operations are subject to the FDA's drug, biological product, or device regulations, we intend to comply with the applicable cGMPs and quality regulations.

If the FDA determines that we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions from public warning letters, fines, injunctions, consent decrees and civil penalties to suspension or delayed issuance of approvals, seizure of our products, total or partial shutdown of our production, withdrawal of approvals, and criminal prosecutions. If any of these events were to occur, it could materially adversely affect us.

## Good Laboratory Practices

The FDA prescribes good laboratory practices, or GLPs, for conducting nonclinical laboratory studies that support applications for research or marketing permits for products regulated by the FDA. These regulations are published in Part 58 of Title 21 of the CFR. GLPs are intended to assure the quality and integrity of the safety data filed in research and marketing permits. GLPs provide requirements for organization, personnel, facilities, equipment, testing facilities operation, test and control articles, protocol for nonclinical laboratory study, records, reports, and disqualification by the FDA. To the extent that we are required to, or the above regulation applies, we intend that our nonclinical studies that are intended to support FDA submissions will comply with GLPs.

Promotion of Foreign-Based Cellular Therapy Treatment—"Medical Tourism"

We may establish, or license technology to third parties in connection with their establishment of, adult stem cell therapy facilities outside the United States. We also intend to work with hospitals and physicians to make the stem cell-based therapies available for patients who travel outside the United States for treatment. "Medical tourism" is defined as the practice of traveling across international borders to obtain health care.

The Federal Trade Commission, or the FTC, has the authority to regulate and police advertising of medical treatments, procedures, and regimens in the United States under the Federal Trade Commission Act, or the FTCA. Under Sections 5(a) and 12 of the FTCA (15 U.S.C. §§45(a) and 52), the FTC has regulatory authority to prevent unfair and deceptive practices and false advertising. Specifically, the FTC requires advertisers and promoters to have a reasonable basis to substantiate and support claims. The FTC has many enforcement powers, one of which is the power to order disgorgement by promoters deemed in violation of the FTCA of any profits made from the promoted business and can order injunctions from further violative promotion. Advertising that we may utilize in connection with our medical tourism operations will be subject to FTC regulatory authority, and we intend to comply with such regulatory régime. Similar laws and requirements are likely to exist in other countries and we intend to comply with such requirements.

## Federal Regulation of Clinical Laboratories

Congress passed the Clinical Laboratory Improvement Amendments, or CLIA, in 1988, which provided the Centers for Medicare and Medicaid Services, or CMS, authority over all laboratory testing, except research, that is performed on humans in the United States. The Division of Laboratory Services, within the Survey and Certification Group, under the Center for Medicaid and State Operations, or CMSO, has the responsibility for implementing the CLIA program.

The CLIA program is designed to establish quality laboratory testing by ensuring the accuracy, reliability, and timeliness of patient test results. Under CLIA, a laboratory is a facility that does laboratory testing on specimens derived from humans and used to provide information for the diagnosis, prevention, treatment of disease, or impairment of, or assessment of health. Laboratories that handle stem cells and other biologic matter are, therefore, included under the CLIA program. Under the CLIA program, laboratories must be certified by the government, satisfy governmental quality and personnel standards, undergo proficiency testing, be subject to inspections, and pay fees. The failure to comply with CLIA standards could result in suspension, revocation, or limitation of a laboratory's CLIA certificate. In addition, fines or criminal penalties could also be levied. To the extent that our business activities require CLIA certification, we intend to obtain and maintain such certification.

## Health Insurance Portability and Accountability Act—Protection of Patient Health Information

The Health Insurance Portability and Accountability Act of 1996, or HIPAA, included the *Administrative Simplification* provisions that required the Secretary of the Department of Health and Human Services, or HHS, to adopt regulations for the electronic exchange, privacy, and security of individually identifiable health information that HIPAA protects (called "protected health information"). HHS published the *Standards for Privacy of Individually Identifiable Health Information*, or the Privacy Rule, and the *Security Standards for the Protection of Electronic Protected Health Information*, or the Security Rule, to protect the privacy and security of protected health information. The Privacy Rule specifies the required, permitted and prohibited uses and disclosures of an individual's protected health information by health plans, health care clearinghouses, and any health care provider that transmits health information in electronic format (referred to as "covered entities"). The Security Rule establishes a national security standard for safeguarding protected health information that is held or transferred in electronic form (referred to as "electronic protected health information"). The Security Rule addresses the technical and non-technical safeguards that covered entities must implement to secure individuals' electronic protected health information.

In addition to covered entities, the Health Information Technology for Economic and Clinical Health Act, or the HITECH Act, made certain provisions of the Security Rule, as well as the additional requirements the HITECH Act imposed that relate to security or privacy and that are imposed on covered entities, directly applicable as a matter of law to individuals and entities that perform permitted functions on behalf of covered entities when those functions involve the use or disclosure of protected health information. These individuals and entities are called "business associates." Covered entities are required to enter into a contract with business associates, called a "business associate agreement," that also imposes many of the Privacy Rule requirements on business associates as a matter of contract.

Regulations implementing the majority of the requirements created by the HITECH Act were issued in January 2013 (we refer to these regulations as the Final Rule). Among other things, the Final Rule broadened the definition of "business associate" to include subcontractors. As a result, a subcontractor who performs tasks involving the use or disclosure of protected health information on behalf of a business associate must likewise comply with the same obligations as the business associate.

The HITECH Act also established notification requirements in the event that a breach of the protected health information occurs at a covered entity or business associate. These notification obligations mandate that each affected individual whose protected health information was impermissibly accessed receive written notification mailed to his residence of record and that the Secretary of HHS and potentially the media also be notified. HHS, through its Office for Civil Rights, investigates breach reports and determines whether administrative or technical modifications are required and whether civil or criminal sanctions should be imposed. Companies failing to comply with HIPAA and the implementing regulations may also be subject to civil money penalties or in the case of knowing violations, potential criminal penalties, including monetary fines, imprisonment, or both. In some cases, the State Attorneys General may seek enforcement and appropriate sanctions in federal court.

To the extent that we are a covered entity or a business associate of a covered entity, we must comply with HIPAA and the implementing regulations. We must also comply with other additional federal or state privacy laws and regulations that may apply to certain diagnoses, such as HIV/AIDS, to the extent that they apply to us.

## Other Applicable U.S. Laws

In addition to the above-described regulation by United States federal and state government, the following are other federal and state laws and regulations that could directly or indirectly affect our ability to operate the business:

- state and local licensure, registration, and regulation of the development of pharmaceuticals and biologics;
- state and local licensure of medical professionals;
- state statutes and regulations related to the corporate practice of medicine;
- laws and regulations administered by U.S. Customs and Border Protection related to the importation of biological material into the United States;
- other laws and regulations administered by the FDA;

- other laws and regulations administered by HHS;
- state and local laws and regulations governing human subject research and clinical trials;
- the federal physician self-referral prohibition, also known as Stark Law, and any state equivalents to Stark Law;
- the federal Anti-Kickback Statute and any state equivalent statutes and regulations'
- federal and state coverage and reimbursement laws and regulations;
- state and local laws and regulations for the disposal and handling of medical waste and biohazardous material;
- Occupational Safety and Health Administration, or OSHA, regulations and requirements;
- the Intermediate Sanctions rules of the IRS providing for potential financial sanctions with respect to "excess benefit transactions" with tax-exempt organizations;
- the Physician Payments Sunshine Act (in the event that our products are classified as drugs, biologics, devices or medical supplies and are reimbursed by Medicare, Medicaid or the Children's Health Insurance Program); and
- state and other federal laws addressing the privacy of health information.

## Foreign Government Regulation

In general, we will need to comply with the government regulations of each individual country in which our therapy centers are located and 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. 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 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 product(s), thereby creating a greater regulatory burden for our cell processing and cell banking technology products. We have not yet thoroughly explored the applicable laws and regulations that we will need to comply with in foreign jurisdictions. It is possible that we may not be permitted to expand our business into one or more foreign jurisdictions.

We do not have any definitive plans or arrangements with respect to the establishment by us of stem cell therapy clinics in any country. We intend to explore any such opportunities as they arise.

## Offices

Our principal executive offices are located at 40 Marcus Drive, Melville, New York, and our telephone number is (631) 760-8100. Our website is www.biorestorative.com. Our internet website and the information contained therein or connected thereto are not intended to be incorporated by reference into this Annual Report.

## **Employees**

We currently have eleven employees all of whom are full-time employees. We believe that our employee relations are good.

## ITEM 1A. RISK FACTORS.

Not applicable. See, however, Item 7 ("Management's Discussion and Analysis of Financial Condition and Results of Operations - Factors That May Affect Future Results and Financial Condition").

## ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not applicable.

## ITEM 2. PROPERTIES.

Our principal executive offices and laboratory are located at 40 Marcus Drive, Melville, New York. We occupy 6,800 square feet of space at the premises pursuant to a lease that was entered into in August 2014 and expires in March 2020; we have an option to extend the term of the lease for five years. The lease provides for an annual base rental during the initial term ranging between \$132,600 and \$149,260. Our premises are suitable and adequate for our current operations.

## ITEM 3. LEGAL PROCEEDINGS.

Not applicable.

## ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

## **PART II**

# <u>MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.</u>

## **Market Information**

Transactions in our common stock are currently reported under the symbol "BRTX" on the OTCQB market. The following table sets forth the range of high and low bids reported in the over-the-counter market for our common stock. On July 7, 2015, we effected a 1-for-20 reverse split of our common stock. The prices shown below have been retroactively adjusted to give effect to the reverse split and represent prices in the market between dealers in securities; they do not include retail markup, markdown or commissions, and do not necessarily represent actual transactions.

	High	Low	
2015 Calendar Year			
First Quarter	\$ 9.90	\$	7.00
Second Quarter	\$ 9.70	\$	6.00
Third Quarter	\$ 12.25	\$	5.50
Fourth Quarter	\$ 6.09	\$	2.95
	 High	Low	
2016 Calendar Year			
First Quarter	\$ 4.45	\$	2.61
Second Quarter	\$ 4.48	\$	3.40
Third Quarter	\$ 3.91	\$	2.71

## Holders

As of March 15, 2017, there were 288 record holders of our shares of common stock.

## **Dividends**

Holders of our shares of common stock are entitled to dividends when, as and if declared by our Board of Directors out of funds legally available.

We have not declared or paid any dividends in the past to the holders of our common stock and do not currently anticipate declaring or paying any dividends in the foreseeable future. We intend to retain earnings, if any, to finance the development and expansion of our business. Future dividend policy will be subject to the discretion of our Board of Directors and will be contingent upon future earnings, if any, our financial condition, capital requirements, general business conditions, and other factors. Therefore, we can give no assurance that any dividends of any kind will ever be paid to holders of our common shares.

## **Recent Sales of Unregistered Securities**

During the three months ended December 31, 2016, we issued the following securities in transactions not involving any public offering. For each of the following transactions, we relied upon Section 4(a)(2) of the Securities Act of 1933, as amended, or the Securities Act, as transactions by an issuer not involving any public offering or Section 3(a)(9) of the Securities Act as a security exchanged by an issuer with its existing security holders exclusively where no commission or other remuneration is paid or given directly or indirectly for soliciting such exchange. For each such transaction, we did not use general solicitation or advertising to market the securities, the securities were offered to a limited number of persons, the investors had access to information regarding us (including information contained in our Annual Report on Form 10-K for the year ended December 31, 2015, Quarterly Reports on Form 10-Q for the periods ended March 31, 2016, June 30, 2016 and September 30, 2016 and Current Reports on Form 8-K filed with the Securities and Exchange Commission, and press releases made by us), and we were available to answer questions by prospective investors. We reasonably believe that each of the investors is an accredited investor. The proceeds were used to reduce our working capital deficiency and for other corporate purposes.

			Warrants				
	Common		Exercise	Term			
Date Issued	Stock	Shares	Price	(Years)	Purchaser(s)	Cons	ideration (1)
10/10/16	52,658				(2)	\$	78,986(3)
10/19/16	7,500				(4)	\$	15,000(5)
10/21/16-12/23/16	193,323	193,323	4.00	5	(2)	\$	579,966
10/24/16	13,041				(2)	\$	26,212(6)
11/7/16	10,515				(2)	\$	21,047(6)
11/22/16	10,874				(2)	\$	21,140(6)

- (1) The value of the non-cash consideration was estimated to be the fair value of our restricted common stock. Since our shares are thinly traded in the open market, the fair value of our equity instruments was estimated by management based on observations of the cash sales prices of both restricted shares and freely tradable shares.
- (2) Accredited investor.
- (3) Issued in connection with the exchange of notes payable.
- (4) Consultant.
- (5) Issued in consideration of consulting services.
- (6) Issued in connection with the conversion of convertible notes payable.

## **Issuer Purchases of Equity Securities**

During the quarter ended December 31, 2016, there were no purchases of common stock made by us or any "affiliated purchaser".

## ITEM 6. SELECTED FINANCIAL DATA.

Not applicable.

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

The following discussion and analysis of the results of operations and financial condition of BioRestorative Therapies, Inc. (and including its subsidiaries, "BRT" or the "Company") as of December 31, 2016 and 2015 and for the years ended December 31, 2016 and 2015 should be read in conjunction with our financial statements and the notes to those financial statements that are included elsewhere in this Annual Report on Form 10-K following Item 16. References in this Management's Discussion and Analysis of Financial Condition and Results of Operations to "us," "we," "our," and similar terms refer to BRT. This Annual Report contains forward-looking statements as that term is defined in the federal securities laws. The events described in forward-looking statements contained in this Annual Report may not occur. Generally these statements relate to business plans or strategies, projected or anticipated benefits or other consequences of our plans or strategies, projected or anticipated benefits from acquisitions to be made by us, or projections involving anticipated revenues, earnings or other aspects of our operating results. The words "may," "will," "expect," "believe," "anticipate," "project," "plan," "intend," "estimate," and "continue," and their opposites and similar expressions, are intended to identify forward-looking statements. We caution you that these statements are not guarantees of future performance or events and are subject to a number of uncertainties, risks and other influences, many of which are beyond our control, which may influence the accuracy of the statements and the projections upon which the statements are based. Reference is made to "Factors That May Affect Future Results and Financial Condition" in this Item 7 for a discussion of some of the uncertainties, risks and assumptions associated with these statements.

## Overview

We develop therapeutic products and medical therapies using cell and tissue protocols, primarily involving adult (non-embryonic) stem cells. We are currently pursuing our *Disc/Spine Program* with our initial therapeutic product being called *BRTX-100*. We have obtained a license to use technology for adult stem cell treatment of disc and spine conditions, including protruding and bulging lumbar discs. The technology is an advanced stem cell injection procedure that may offer relief from lower back pain, buttock and leg pain, and numbness and tingling in the legs and feet. We are also developing our *ThermoStem Program*. This pre-clinical program involves the use of brown fat in connection with the cell-based treatment of type 2 diabetes and obesity as well as hypertension, other metabolic disorders and cardiac deficiencies. A United States patent related to the *ThermoStem Program* was issued in September 2015.

We are developing a patented curved needle device, or CND, that is a needle system to allow access to difficult to locate regions for the delivery or removal of fluids and other substances. We also offer stem cell derived cosmetic and skin care products.

Our offices are located in Melville, New York where we have established a laboratory facility in order to increase our capabilities for the further development of possible cellular-based treatments, products and protocols, stem cell-related intellectual property and translational research applications.

As of December 31, 2016, our accumulated deficit was \$41,959,798, our stockholders' deficiency was \$5,000,282 and our working capital deficiency was \$5,783,184. We have historically only generated a modest amount of revenue, our losses have principally been operating expenses incurred in research and development, marketing and promotional activities in order to commercialize our products and services, plus costs associated with meeting the requirements of being a public company. We expect to continue to incur substantial costs for these activities over at least the next year.

Based upon our working capital deficiency as of December 31, 2016 and our forecast for continued operating losses, we require equity and/or debt financing to continue our operations. As of December 31, 2016, our outstanding debt of \$2,336,565, together with interest at rates ranging between 0% and 15% per annum, was due on various dates through October 2017. Subsequent to December 31, 2016 and through March 15, 2017, we have received aggregate equity proceeds (including proceeds from the exercise of common stock purchase warrants) and debt proceeds of \$945,000 and \$200,000, respectively, debt and accrued interest of \$325,000 and \$9,679, respectively, has been converted into or exchanged for common stock, \$89,000 of debt and net short-term advances have been repaid and the due date for the repayment of \$322,000 of debt has been extended through April 2017. Giving effect to the above actions, we currently have notes payable aggregating \$427,500 which are past due. Based upon our working capital deficiency and outstanding debt, we expect to be able to fund our operations through April 2017. We anticipate that we will require between \$8,000,000 and \$10,000,000 in financing to commence and complete a Phase 2 clinical trial with regard to our *Disc/Spine Program*. We anticipate that we will require between \$20,000,000 and \$30,000,000 in further additional funding to complete our clinical trials with regard to our *Disc/Spine Program*. We will also require a substantial amount of additional funding if we determine to establish a manufacturing operation with regard to our *Disc/Spine Program* (as opposed to utilizing a third party manufacturer) and to implement our other programs discussed in "Business", including our metabolic *ThermoStem Program*. No assurance can be given that we will be able to obtain any required financing on commercially reasonable terms or otherwise.

We are currently seeking several different financing alternatives to support our future operations and are currently in the process of negotiating extensions or discussing conversions to equity with respect to our outstanding indebtedness. If we are unable to obtain such additional financing on a timely basis or, notwithstanding any request we may make, our debt holders do not agree to convert their notes into equity or extend the maturity dates of their notes, we may have to curtail our development, marketing and promotional activities, which would have a material adverse effect on our business, financial condition and results of operations, and ultimately we could be forced to discontinue our operations and liquidate. See "Liquidity and Capital Resources" below.

## **Recent Developments**

## **IND Application**

In January 2017 we announced that we had submitted an investigational new drug, or IND, application to the U.S. Food and Drug Administration, or the FDA, to obtain clearance to commence a Phase 2 clinical trial using our lead cell therapy candidate, *BRTX-100*, to treat chronic lower back pain due to degenerative disc disease related to protruding/bulging discs. In February 2017, we received such clearance from the FDA. We intend to commence such clinical trial during the fourth quarter of 2017. See Item 1 ("Business – Disc/Spine Program").

## **Consolidated Results of Operations**

## Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

The following table presents selected items in our consolidated statements of operations for the years ended December 31, 2016 and 2015, respectively:

		For the Years Ended, December 31,		
	2	016	2015	
Revenues	\$	36,355	\$ 628,915	
Cost of sales		102	261,504	
Gross Profit		36,253	367,411	
Operating Expenses				
Marketing and promotion		86,451	168,352	
Consulting		1,605,917	1,394,037	
Research and development		2,883,563	2,105,059	
General and administrative		3,257,579	3,870,325	
Total Operating Expenses		7,833,510	7,537,773	
Loss From Operations		(7,797,257)	(7,170,362)	
Other Income (Expense)				
Interest expense		(221,608)	(263,583)	
Amortization of debt discount		(542,336)	(339,443)	
Loss on extinguishment of notes payable, net		(58,787)	(35,677)	
Warrant modification expense		(28,486)	(114,415)	
Gain on settlement of payables		12,182	<u>-</u>	
Total Other Expense		(839,035)	(753,118)	
Net Loss	\$	(8,636,292)	\$ (7,923,480)	

## Revenues

For the year ended December 31, 2016, we generated \$36,000 from royalty revenue in connection with our sublicense agreement and \$355 from sales of *Stem Pearls* skincare products. For the year ended December 31, 2015, we generated \$609,490 of revenues through the services provided pursuant to our research and development agreements, \$19,000 from royalty revenue in connection with our sublicense agreement and \$425 from sales of *Stem Pearls* skincare products. The decrease in our revenues for the year ended December 31, 2016 versus 2015 was primarily due to the completion of our obligations under our research and development agreements as of December 31, 2015, and as of the date of this filing there were no new research and development agreements.

## Cost of sales

For the year ended December 31, 2016, cost of sales was \$102 as compared to \$261,504 for 2015. For the year ended December 31 2016, cost of sales consisted of the costs of the underlying *Stem Pearls* skincare products. For the year ended December 31, 2015, cost of sales consisted primarily of the portion of employee salary expense, consultant fees, and laboratory supplies expense related to our research and development agreements. The decrease in our cost of sales for the year ended December 31, 2016 versus 2015 was due to the completion of our obligations under our research and development agreements during 2015.

## Gross Profit

For the year ended December 31, 2016, gross profit declined to \$36,253 (approximately 100% of revenues) as compared to \$367,411 (58% of revenues) for the year ended December 31, 2015, primarily due to completion of obligations under our research and development agreements during 2015.

#### Marketing and promotion

Marketing and promotion expenses include advertising and promotion, marketing and seminars, meals, entertainment and travel expenses. For the year ended December 31, 2016, marketing and promotion expenses decreased by \$81,901, or 49%, from \$168,352 to \$86,451, as compared to the year ended December 31, 2015. The decrease is primarily due to reduced travel activity and associated costs of approximately \$79,000.

We expect that marketing and promotion expenses will increase in the future as we increase our marketing activities following full commercialization of our products and services.

## Consulting

Consulting expenses consist of consulting fees and stock-based compensation to consultants. For the year ended December 31, 2016, consulting expenses increased \$211,880, or 15%, from \$1,394,037 to \$1,605,917, as compared to the year ended December 31, 2015. The increase is primarily due to an approximately \$180,000 increase in consultant stock-based compensation expense related to options granted to directors and consultants and a \$75,000 increase in cash director fees related to the appointment of two additional directors in 2016, partially offset by a decrease of approximately \$43,000 in other cash consulting fees.

#### Research and development

Research and development expenses include cash and non-cash compensation of (a) our Chief Executive Officer (in part during 2015); (b) our Vice President of Research and Development; (c) our Scientific Advisory Board members; (d) our President, Disc/Spine Division; and (e) laboratory staff and costs related to our brown fat and disc/spine initiatives. Research and development expenses are expensed as they are incurred. For the year ended December 31, 2016, research and development expenses increased by \$778,504, from \$2,105,059 to \$2,883,563, or 37%, as compared to the year ended December 31, 2015. The increase is primarily related to an approximately \$560,000 increase in payroll and associated taxes due to salary raises, increased headcount and cash bonuses, an approximately \$196,000 increase in costs related to a third party laboratory associated with our disc/spine initiative, and an approximately \$76,000 increase in stock-based compensation to our Vice President of Research and Development, President, Disc/Spine Division, and Scientific Advisory Board members, partially offset by an approximately \$108,000 decrease due to our Chief Executive Officer no longer devoting time to research and development.

We expect that our research and development expenses will increase with the continuation of the aforementioned initiatives.

## General and administrative

General and administrative expenses consist primarily of salaries, bonuses, payroll taxes, severance costs and stock-based compensation to employees (excluding any cash or non-cash compensation of (a) our Chief Executive Officer attributable to research and development (through 2015); (b) our Vice President of Research and Development; (c) our President, Disc/Spine Division; and (d) our laboratory staff) as well as corporate support expenses such as legal and professional fees, investor relations and occupancy related expenses. For the year ended December 31, 2016, general and administrative expenses decreased by \$612,746, or 16%, from \$3,870,325 to \$3,257,579, as compared to the year ended December 31, 2015. The decrease is primarily related to decreased professional fees of approximately \$965,000, mainly incurred in connection with our 2015 aborted underwritten public offering and a 2015 legal settlement, partially offset by an increase of approximately \$326,000 in stock-based compensation to employees and our Chief Executive Officer.

We expect that our general and administrative expenses will increase as we expand our staff, develop our infrastructure and incur additional costs to support the growth of our business.

Interest expense

For the year ended December 31, 2016, interest expense decreased \$41,975, or 16%, to \$221,608 as compared to \$263,583 during the year ended December 31, 2015. The decrease was due to a reduction in interest-bearing short-term borrowings as compared to the year ended December 31, 2015.

Amortization of debt discount

For the year ended December 31, 2016, amortization of debt discount increased by \$202,893 or 60%, to \$542,336 as compared to \$339,443 during the year ended December 31, 2015. The increase was primarily due to the timing of the recognition of expense related to the beneficial conversion features of convertible notes and the recognition of the debt discount expense.

Loss on extinguishment of notes payable, net

For the year ended December 31, 2016, we recorded a loss on extinguishment of notes payable, net, of \$58,787, which is associated with investors' exchange of debt into equity securities, as compared to a loss on extinguishment of notes payable of \$35,677 for the year ended December 31, 2015.

Warrant modification expense

During the year ended December 31, 2016, we recorded expense related to the modification of outstanding warrants of \$28,486, as compared to expense related to the modification of outstanding warrants of \$114,415 for the year ended December 31, 2015.

Gain on settlement of payables, net

During the year ended December 31, 2016, we recorded a gain on settlement of payables, net, of \$12,182. We had no such gains during the year ended December 31, 2015.

## Liquidity and Capital Resources

## Liquidity

We measure our liquidity in a number of ways, including the following:

		December 31,		
	2016	2015		
Cash	<u>\$</u>	31,822 \$ 166,555		
Working Capital Deficiency	\$ (5,7	(5,323,179)		
Notes Payable (Gross)	\$ 2,3	336,565 \$ 1,470,083		

## Availability of Additional Funds

Based upon our working capital and stockholders' deficiency of \$5,783,184 and \$5,000,282, respectively, as of December 31, 2016, we require additional equity and/or debt financing to continue our operations. These conditions indicate that there is substantial doubt about our ability to continue as a going concern within the next twelve months from the date of this filing.

As of December 31, 2016, our outstanding debt of \$2,336,565, together with interest at rates ranging between 0% and 15% per annum, was due on various dates through October 2017. Subsequent to December 31, 2016 and through March 15, 2017, we have received aggregate equity proceeds (including proceeds from the exercise of common stock purchase warrants) and debt proceeds of \$945,000 and \$200,000, respectively, debt and accrued interest of \$325,000 and \$9,679, respectively, has been converted into or exchanged for common stock, \$89,000 of debt and net short-term advances have been repaid and the due date for the repayment of \$322,000 of debt has been extended through April 2017. Giving effect to the above actions, we currently have notes payable aggregating \$427,500 which are past due. As of the date of filing, our outstanding debt was as follows:

Maturity I	vate	Principal Amount		
Past Due	\$	427,500		
QE 3/31/2017		20,000		
QE 6/30/2017		428,000		
QE 9/30/2017		867,000		
QE 12/31/2017		437,063		
	\$	2,179,563		

Based upon our working capital deficiency, outstanding debt and forecast for continued operating losses we expect that the cash we currently have available will fund our operations through April 2017. Thereafter, we will need to raise further capital, through the sale of additional equity or debt securities, to support our future operations and to repay our debt (unless, if requested, the debt holders agree to convert their notes into equity or extend the maturity dates of their notes). Our operating needs include the planned costs to operate our business, including amounts required to fund working capital and capital expenditures. Our future capital requirements and the adequacy of our available funds will depend on many factors, including our ability to successfully commercialize our products and services, competing technological and market developments, and the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement our product and service offerings.

We may be unable to raise sufficient additional capital when we need it or raise capital on favorable terms. Debt financing may require us to pledge certain assets and enter into covenants that could restrict certain business activities or our ability to incur further indebtedness, and may contain other terms that are not favorable to our stockholders or us. If we are unable to obtain adequate funds on reasonable terms, we may be required to significantly curtail or discontinue operations or obtain funds by entering into financing agreements on unattractive terms.

Our consolidated financial statements included elsewhere in this Annual Report on Form 10-K have been prepared in conformity with accounting principles generally accepted in the United States of America, or GAAP, which contemplate our continuation as a going concern and the realization of assets and satisfaction of liabilities in the normal course of business. The carrying amounts of assets and liabilities presented in the financial statements do not necessarily purport to represent realizable or settlement values. The financial statements do not include any adjustment that might result from the outcome of this uncertainty.

During the year ended December 31, 2016, our sources and uses of cash were as follows:

#### Net Cash Used in Operating Activities

We experienced negative cash flow from operating activities for the years ended December 31, 2016 and 2015 in the amounts of \$5,002,675 and \$3,122,063, respectively. The net cash used in operating activities for the year ended December 31, 2016 was primarily due to cash used to fund a net loss of \$8,636,292, adjusted for non-cash expenses in the aggregate amount of \$3,464,871, partially offset by \$168,745 of cash provided by changes in the levels of operating assets and liabilities, primarily as a result of increases in accrued expenses and other liabilities, due to cash constraints during the period. The net cash used in operating activities for the year ended December 31, 2015 was primarily due to cash used to fund a net loss of \$7,923,480, adjusted for non-cash expenses in the aggregate amount of \$2,743,141, partially offset by \$2,058,276 of cash provided by changes in the levels of operating assets and liabilities, primarily as a result of increases in accounts payable plus accrued expenses and other liabilities, due to cash constraints during the period.

# Net Cash Used in Investing Activities

During the year ended December 31, 2016, net cash used in investing activities was \$188,764 used for the purchase of medical equipment. During the year ended December 31, 2015, net cash used in investing activities was \$483,069 due to \$408,069 used for the purchase of medical equipment, leasehold improvements and computer equipment plus \$75,000 used to retain the exclusivity of our disc/spine license.

# Net Cash Provided by Financing Activities

Net cash provided by financing activities during the years ended December 31, 2016 and 2015 was \$5,056,706 and \$3,679,889, respectively. During the year ended December 31, 2016, \$1,345,471 of net proceeds were from debt financings and \$3,711,236 of proceeds were from equity financings (including proceeds received in connection with the exercise of common stock purchase warrants). During the year ended December 31, 2015, \$1,382,045 of net proceeds were from debt financings and \$2,297,844 of proceeds were from equity financings (including proceeds received in connection with the exercise of common stock purchase warrants).

# **Critical Accounting Policies and Estimates**

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at dates of the financial statements and the reported amounts of revenue and expenses during the periods. Our significant estimates and assumptions include the recoverability and useful lives of long-lived assets, the fair value of our equity securities and the valuation allowance related to our deferred tax assets. Certain of our estimates, including the carrying amount of the intangible assets, could be affected by external conditions, including those unique to us and general economic conditions. It is reasonably possible that these external factors could have an effect on our estimates and could cause actual results to differ from those estimates.

Intangible Assets

Intangible assets are comprised of trademarks and licenses with original estimated useful lives of 10 and 17.7 years, respectively. Once placed into service, we amortize the cost of the intangible assets over their estimated useful lives on a straight-line basis.

#### Impairment of Long-lived Assets

We review for the impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. While our near term liquidity is tight, historically we have been successful in raising capital as needed (although there can be no assurance that we will continue to be successful in raising capital as needed). We continue to progress our scientific agenda and meet related milestones. We have not identified any impairment losses.

Income Taxes

We recognize deferred tax assets and liabilities for the expected future tax consequences of items that have been included or excluded in our financial statements or tax returns. Deferred tax assets and liabilities are determined on the basis of the difference between the tax basis of assets and liabilities and their respective financial reporting amounts ("temporary differences") at enacted tax rates in effect for the years in which the temporary differences are expected to reverse.

We adopted the provisions of Accounting Standards Codification ("ASC") Topic 740-10, which prescribes a recognition threshold and measurement process for financial statements recognition and measurement of a tax position taken or expected to be taken in a tax return.

Stock-Based Compensation

We measure the cost of services received in exchange for an award of equity instruments based on the fair value of the award. For employees and directors, the fair value of the award is measured on the grant date and for non-employees, the fair value of the award is generally re-measured on vesting dates and interim financial reporting dates until the service period is complete. The fair value amount is then recognized over the period during which services are required to be provided in exchange for the award, usually the vesting period. Since the shares underlying our 2010 Equity Participation Plan, or the Plan, were registered on May 27, 2014, we estimate the fair value of the awards granted under the Plan based on the market value of our freely tradable common stock as reported on the OTCQB market. The fair value of our restricted equity instruments was estimated by management based on observations of the cash sales prices of both restricted shares and freely tradable shares. Awards granted to directors are treated on the same basis as awards granted to employees.

#### **Recently Issued Accounting Pronouncements**

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers," ("ASU 2014-09"). ASU 2014-09 supersedes the revenue recognition requirements in ASC 605 - Revenue Recognition and most industry-specific guidance throughout the ASC. The standard requires that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. ASU 2014-09 should be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application. To allow entities additional time to implement systems, gather data and resolve implementation questions, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, in August 2015, to defer the effective date of ASU No. 2014-09 for one year, which is fiscal years beginning after December 15, 2017. We are currently evaluating the impact of the adoption of ASU 2014-09 on our consolidated financial statements or disclosures.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements – Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern" ("ASU 2014-15"). ASU 2014-15 explicitly requires management to evaluate, at each annual or interim reporting period, whether there are conditions or events that exist which raise substantial doubt about an entity's ability to continue as a going concern and to provide related disclosures. ASU 2014-15 is effective for annual periods ending after December 15, 2016, and annual and interim periods thereafter, with early adoption permitted. The adoption of this standard did not have a material impact on our financial statement disclosures.

In April 2015, the FASB issued ASU No. 2015-03, "Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs", or ASU 2015-03 amends the existing guidance to require that debt issuance costs be presented in the balance sheet as a deduction from the carrying amount of the related debt liability instead of as a deferred charge. ASU 2015-03 is effective on a retrospective basis for annual and interim reporting periods beginning after December 15, 2015; earlier adoption is permitted. Additionally, in August 2015, the FASB issued guidance expanding the April 2015 update (ASU No. 2015-15). It states that, given the absence of authoritative guidance within the update, the SEC staff would not object to an entity deferring and presenting debt issuance costs as an asset for revolving lines of credit and subsequently amortizing the deferred debt issuance costs ratably over the term of the arrangement, regardless of whether there are any outstanding borrowings on the line of credit. This guidance is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years, with early adoption permitted for financial statements that have not been previously issued. Full retrospective application is required. The adoption of this standard did not have a material impact on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). ASU 2016-02 requires an entity to recognize assets and liabilities arising from a lease for both financing and operating leases. ASU 2016-02 will also require new qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. We are currently evaluating ASU 2016-02 and its impact on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, "Compensation – Stock Compensation (Topic 718)" ("ASU 2016-09"). ASU 2016-09 requires an entity to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, with early adoption permitted. We are currently evaluating ASU 2016-09 and its impact on our consolidated financial statements or disclosures.

In April 2016, the FASB issued ASU 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing" ("ASU 2016-10"). The amendments in this update clarify the following two aspects to Topic 606: identifying performance obligations and the licensing implementation guidance, while retaining the related principles for those areas. The entity first identifies the promised goods or services in the contract and reduces the cost and complexity. An entity evaluates whether promised goods and services are distinct. Topic 606 includes implementation guidance on determining whether an entity's promise to grant a license provides a customer with either a right to use the entity's intellectual property (which is satisfied over time). ASU 2016-10 is effective for fiscal years beginning after December 15, 2017, including interim reporting periods within that reporting period. We are currently evaluating ASU 2016-10 and its impact on our consolidated financial statements or disclosures.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"). The new standard will make eight targeted changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. The new standard is effective for fiscal years beginning after December 15, 2017. We will require adoption on a retrospective basis unless it is impracticable to apply, in which case we would be required to apply the amendments prospectively as of the earliest date practicable. We are currently evaluating ASU 2016-15 and its impact on our consolidated financial statements or disclosures.

### **Off-Balance Sheet Arrangements**

We have no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

# **Factors That May Affect Future Results and Financial Condition**

The risk factors listed in this section provide examples of risks, uncertainties and events that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Readers should be aware that the occurrence of any of the events described in these risk factors could have a material adverse effect on our business, results of operations and financial condition. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events, or otherwise.

# **Risks Related to Our Business Generally**

We have a limited operating history; we have incurred substantial losses since inception; we expect to continue to incur losses for the near term; we have a substantial working capital deficiency and a stockholders' deficiency; we believe these conditions indicate that there is substantial doubt about our ability to continue as a going concern within the next twelve months from the date of this filing; the report of our independent registered public accounting firm contains an explanatory paragraph that expresses substantial doubt about our ability to continue as a going concern.

We have a limited operating history. Since our inception, we have incurred net losses. As of December 31, 2016, we had a working capital deficiency of \$5,783,184 and stockholders' deficiency of \$5,000,282. We believe these conditions indicate that there is substantial doubt about our ability to continue as a going concern within the next twelve months from the date of this filing. The report of our independent registered public accounting firm with respect to our financial statements as of December 31, 2016 and 2015 and for the years then ended indicates that our financial statements have been prepared assuming that we will continue as a going concern. The report states that, since we have incurred net losses since inception and we need to raise additional funds to meet our obligations and sustain our operations, there is substantial doubt about our ability to continue as a going concern. Our plans in regard to these matters are described in footnote 2 to our audited financial statements as of December 31, 2016 and 2015 and for the years then ended, which are included following Item 16 ("Form 10-K Summary"). Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

#### We will need to obtain a significant amount of financing to initiate and complete our clinical trials and implement our business plan.

Since our inception, we have not generated significant revenues from our operations and have funded our operations through the sale of our equity securities (approximately \$14,000,000) and debt securities (approximately \$12,000,000). The implementation of our business plan, as discussed in Item 1 ("Business"), will require the receipt of sufficient equity and/or debt financing to purchase necessary equipment, technology and materials, fund our research and development efforts, retire our outstanding debt and otherwise fund our operations. We anticipate that we will require between \$8,000,000 and \$10,000,000 in financing to commence and complete a Phase 2 clinical trial with regard to our *Disc/Spine Program*. We anticipate that we will require between \$20,000,000 and \$30,000,000 in further additional funding to complete our clinical trials using *BRTX-100*. We will also require a substantial amount of additional funding if we determine to establish a manufacturing operation with regard to our *Disc/Spine Program* (as opposed to utilizing a third party manufacturer) and to implement our other programs discussed in Item 1 ("Business"), including our metabolic *ThermoStem Program*. No assurance can be given that the anticipated amounts of required funding are correct or that we will be able to accomplish our goals within the timeframes projected. In addition, no assurance can be given that we will be able to obtain any required financing on commercially reasonable terms or otherwise. In the event we do not obtain the financing required for the above purposes, we may have to curtail our development, marketing and promotional activities, which would have a material adverse effect on our business, financial condition and results of operations, and ultimately we could be forced to discontinue our operations and liquidate.

# We will need to obtain additional financing to satisfy debt obligations.

As described in Item 7 ("Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Availability of Additional Funds"), as of December 31, 2016, our outstanding debt of \$2,336,565, together with interest at rates ranging between 0% and 15% per annum, are due on various dates through October 2017. Subsequent to December 31, 2016 and through March 15, 2017, we have received aggregate equity proceeds (including proceeds received from the exercise of common stock purchase warrants) and debt proceeds of \$945,000 and \$200,000, respectively, debt and accrued interest of \$325,000 and \$9,679, respectively, has been converted into or exchanged for common stock, \$89,000 of debt and short-term advance have been repaid and the due date for the repayment of \$322,000 of debt has been extended through April 2017. Giving effect to the above actions, we currently have notes payable aggregating \$427,500 which are past due. As of March 15, 2017, the outstanding balance of our debt of \$2,179,563, together with accrued interest, was due and payable between on demand and October 2017. Unless we obtain additional financing or, upon our request, the debt holders agree to convert their debt into equity or extend the maturity dates of the debt, we will not be able to repay such debt. Based upon our working capital deficiency and outstanding debt, we expect to be able to fund our operations through April 2017. Even if we are able to satisfy our debt obligations, our cash balance and the revenues for the foreseeable future from our anticipated operations will not be sufficient to fund the development of our business plan.

#### Our business strategy is high-risk.

We are focusing our resources and efforts primarily on the development of cellular-based products and services which will require extensive cash for research, development and commercialization activities. This is a high-risk strategy because there is no assurance that our products and services, including our *Disc/Spine Program* and our *ThermoStem* metabolic brown fat research initiative, will ever become commercially viable (commercial risk), that we will prevent other companies from depriving us of market share and profit margins by offering services and products based on our inventions and developments (legal risk), that we will successfully manage a company in a new area of business, regenerative medicine, and on a different scale than we have operated in the past (operational risk), that we will be able to achieve the desired therapeutic results using stem and regenerative cells (scientific risk), or that our cash resources will be adequate to develop our products and services until we become profitable, if ever (financial risk). We are using our cash in one of the riskiest industries in the economy (strategic risk). This may make our stock an unsuitable investment for many investors.

# We will need to enter into agreements in order to implement our business strategy.

Except for certain license and research and development agreements described in Item 1 ("Business"), we do not have any material agreements or understandings in place with respect to the implementation of our business strategy. No assurances can be given that we will be able to enter into any necessary agreements with respect to the development of our business. Our inability to enter into any such agreements would have a material adverse effect on our results of operations and financial condition.

# We depend on our executive officers and on our ability to attract and retain additional qualified personnel; we do not currently have a Chief Financial Officer.

Our performance is substantially dependent on the performance of Mark Weinreb, our Chief Executive Officer. We rely upon him for strategic business decisions and guidance. Mr. Weinreb is subject to an employment agreement with us that is scheduled to expire in December 2017. We are also dependent on the performance of Edward Field, President of our Disc/Spine Division, and Francisco Silva, our Vice President of Research and Development, in establishing and developing our products and operations. Mr. Field and Mr. Silva are also subject to employment agreements with us. We do not have any key-man insurance policies on the lives of any of our executive officers. We do not currently have a Chief Financial Officer. Pending the hiring of a Chief Financial Officer, we are utilizing financial consultants with regard to the preparation of our financial statements. We believe that our future success in developing marketable products and services and achieving a competitive position will depend in large part upon whether we can attract and retain additional qualified management and scientific personnel, including a Chief Financial Officer. Competition for such personnel is intense, and there can be no assurance that we will be able to attract and retain such personnel. The loss of the services of Mr. Weinreb, Mr. Field and/or Mr. Silva or the inability to attract and retain additional personnel, including a Chief Financial Officer, and develop expertise as needed would have a substantial negative effect on our results of operations and financial condition

#### Continued turmoil in the economy could harm our business.

Negative trends in the general economy, including, but not limited to, trends resulting from an actual or perceived recession, tightening credit markets, increased cost of commodities, 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. Our 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.

# Risks Related to Our Cell Therapy Product Development Efforts

Our future success is significantly dependent on the timely and successful development and commercialization of BRTX-100, our lead product candidate for the treatment of chronic lumbar disc disease; if we encounter delays or difficulties in the development of this product candidate, as well as any other product candidates, our business prospects would be significantly harmed.

We are dependent upon the successful development, approval and commercialization of our product candidates. Before we are able to seek regulatory approval of our product candidates, we must conduct and complete extensive clinical trials to demonstrate their safety and efficacy in humans. Our lead product candidate, *BRTX-100*, is in early stages of development and we only recently received FDA clearance to commence a Phase 2 clinical trial using *BRTX-100* to treat chronic lower back pain due to degenerative disc disease related to protruding/bulging discs.

Clinical testing is expensive, difficult to design and implement, and can take many years to complete. Importantly, a failure of one or more of these or any other clinical trials can occur at any stage of testing. We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to complete our clinical studies, receive regulatory approval or commercialize our cell therapy product candidates, including the following:

- suspensions, delays or changes in the design, initiation, enrollment, implementation or completion of required clinical trials; adverse changes in our financial
  position or significant and unexpected increases in the cost of our clinical development program; changes or uncertainties in, or additions to, the regulatory
  approval process that require us to alter our current development strategy; clinical trial results that are negative, inconclusive or less than desired as to safety
  and/or efficacy, which could result in the need for additional clinical studies or the termination of the product's development; delays in our ability to manufacture
  the product in quantities or in a form that is suitable for any required clinical trials;
- intellectual property constraints that prevent us from making, using, or commercializing any of our cell therapy product candidates;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of these product candidates may be insufficient or inadequate; inability to generate sufficient pre-clinical, toxicology, or other *in vivo* or *in vitro* data to support the initiation of clinical studies;

- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical study sites;
- delays in obtaining required Institutional Review Board, or IRB, approval at each clinical study site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND application or amendment, or equivalent application or amendment; as a result of a new safety finding that presents unreasonable risk to clinical trial participants; a negative finding from an inspection of our clinical study operations or study sites; developments on trials conducted by competitors or approved products post-market for related technology that raises FDA concerns about risk to patients of the technology broadly; or if the FDA finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties, or us to adhere to clinical study requirements;
- failure to perform in accordance with the FDA's current Good Clinical Practices, or cGCP, requirements, or applicable regulatory guidelines in other countries;
- delays in having patients qualify for or complete participation in a study or return for post-treatment follow-up;
- patients dropping out of a study;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the requirement by the FDA that we conduct additional research or studies, and/or to provide additional preclinical data, prior to or in connection with our clinical trials;
- transfer of manufacturing processes from our academic collaborators to larger-scale facilities operated by either a contract manufacturing organization, or CMO, or by us, and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process;
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of our product candidates for use in clinical studies or the
  inability to do any of the foregoing; and
- the FDA may not accept clinical data from trials that are conducted at clinical sites in countries where the standard of care is potentially different from the United States.

Any inability to successfully complete pre-clinical and clinical development could result in additional costs to us or impair our ability to generate revenue. In addition, if we make manufacturing or formulation changes to our product candidates, we may be required to, or we may elect to, conduct additional studies to bridge our modified product candidates to earlier versions. Clinical study delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

Even if we are able to successfully complete our clinical development program for our product candidates, and ultimately receive regulatory approval to market one or more of the products, we may, among other things:

- obtain approval for indications that are not as broad as the indications we sought;
- have the product removed from the market after obtaining marketing approval;
- encounter issues with respect to the manufacturing of commercial supplies;
- be subject to additional post-marketing testing requirements; and/or
- be subject to restrictions on how the product is distributed or used.

We anticipate that we will not be able to commercialize our BRTX-100 product for at least five years.

We may experience delays and other difficulties in enrolling a sufficient number of patients in our clinical trials which could delay or prevent the receipt of necessary regulatory approvals.

We may not be able to initiate or complete as planned any clinical trials if we are unable to identify and enroll a sufficient number of eligible patients to participate in the clinical trials required by the FDA or other regulatory authorities. We also may be unable to engage a sufficient number of clinical trial sites to conduct our trials.

We may face challenges in enrolling patients to participate in our clinical trials due to the novelty of our cell-based therapies, the size of the patient populations and the eligibility criteria for enrollment in the trial. In addition, some patients may have concerns regarding cell therapy that may negatively affect their perception of therapies under development and their decision to enroll in the trials. Furthermore, patients suffering from diseases within target indications may enroll in competing clinical trials, which could negatively affect our ability to complete enrollment of our trials. Enrollment challenges in clinical trials often result in increased development costs for a product candidate, significant delays and potentially the abandonment of the clinical trial.

#### We may have other delays in completing our clinical trials and we may not complete them at all.

We have not commenced the clinical trials necessary to obtain FDA approval to market *BRTX-100* or any of our other products in development. Our management lacks significant experience in completing clinical trials and bringing a drug through commercialization. Clinical trials for *BRTX-100* and other products in development may be delayed or terminated as a result of many factors, including the following:

- patients failing to complete clinical trials due to dissatisfaction with the treatment, side effects or other reasons;
- failure by regulators to authorize us to commence a clinical trial;
- suspension or termination by regulators of clinical research for many reasons, including concerns about patient safety or our failure, or the failure of our contract manufacturers, to comply with current Good Manufacturing Practices, or cGMP, requirements;
- delays or failure to obtain clinical supply for our products necessary to conduct clinical trials from contract manufacturers;
- treatment candidates demonstrating a lack of efficacy during clinical trials;
- inability to continue to fund clinical trials or to find a partner to fund the clinical trials;
- competition with ongoing clinical trials and scheduling conflicts with participating clinicians; and
- delays in completing data collection and analysis for clinical trials.

Any delay or failure to complete clinical trials and obtain FDA approval for our product candidates could have a material adverse effect on our cost to develop and commercialize, and our ability to generate revenue from, a particular product candidate.

# The development of our cell therapy product candidates is subject to uncertainty because autologous cell therapy is inherently variable.

When manufacturing an autologous cell therapy, the number and the composition of the cell population varies from patient to patient. Such variability in the number and composition of these cells could adversely affect our ability to manufacture autologous cell therapies in a cost-effective or profitable manner and meet acceptable product release specifications for use in a clinical trial or, if approved, for commercial sale. As a consequence, the development and regulatory approval process for autologous cell therapy products could be delayed or may never be completed.

Any disruption to our access to the media (including cell culture media) and reagents we are using in the clinical development of our cell therapy product candidates could adversely affect our ability to perform clinical trials and seek future regulatory submissions.

Certain media (including cell culture media) and reagents, as well as devices, materials and systems, that we intend to use in our planned clinical trials, and that we may need or use in commercial production, are provided by unaffiliated third parties. Any lack of continued availability of these media, reagents, devices, materials and systems for any reason would have a material adverse effect on our ability to complete these studies and could adversely impact our ability to achieve commercial manufacture of our planned therapeutic products. Although other available sources for these media, reagents, devices, materials and systems may exist in the marketplace, we have not evaluated their cost, effectiveness, or intellectual property foundation and therefore cannot guarantee the suitability or availability of such other potential sources.

### Products that appear promising in research and development may be delayed or may fail to reach later stages of clinical development.

The successful development of cellular based products is highly uncertain. Product candidates that appear promising in research and development may be delayed or fail to reach later stages of development. Decisions regarding the further development of product candidates must be made with limited and incomplete data, which makes it difficult to ensure or even accurately predict whether the allocation of limited resources and the expenditure of additional capital on specific product candidates will result in desired outcomes. Pre-clinical and clinical data can be interpreted in different ways, and negative or inconclusive results or adverse events during a clinical trial could delay, limit or prevent the development of a product candidate.

Our clinical trials may fail to demonstrate adequately the safety and efficacy of our product candidates, which would prevent or delay regulatory approval and commercialization.

The clinical trials of our product candidates are, and the manufacturing and marketing of our products will be, subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and market our product candidates. Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. In particular, because our product candidates are subject to regulation as biological drug products, we will need to demonstrate that they are safe, pure, and potent for use in their target indications. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. The risk/benefit profile required for product licensure will vary depending on these factors and may include decrease or elimination of pain, adequate duration of response, a delay in the progression of the disease, an improvement in function and/or decrease in disability.

In addition, even if such trials are successfully completed, we cannot guarantee that the FDA will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

We presently lack manufacturing capabilities to produce our product candidates at commercial scale quantities and do not have an alternate manufacturing supply, which could negatively impact our ability to meet any future demand for the products.

Currently, we expect our laboratory (or a contract laboratory) to provide the cell processing services necessary for clinical production of *BRTX-100* for our disc clinical trial. To date, we have not produced any products at our laboratory. We expect that we would need to significantly expand our manufacturing capabilities to meet potential commercial demand for *BRTX-100* and any other of our product candidates, if approved, as well as any of our other product candidates that might attain regulatory approval. Such expansion would require additional regulatory approvals. Even if we increase our manufacturing capabilities, it is possible that we may still lack sufficient capacity to meet demand. Ultimately, if we are unable to supply our products to meet commercial demand, whether because of processing constraints or other disruptions, delays or difficulties that we experience, sales of the products and their long-term commercial prospects could be significantly damaged.

We do not presently have a third-party manufacturer for *BRTX-100* or any of our other product candidates. If our facilities at which these product candidates would be manufactured or our equipment were significantly damaged or destroyed, or if there were other disruptions, delays or difficulties affecting manufacturing capacity, our planned and future clinical studies and commercial production for these product candidates would likely be significantly disrupted and delayed. It would be both time consuming and expensive to replace this capacity with third parties, particularly since any new facility would need to comply with the regulatory requirements.

Ultimately, if we are unable to supply our cell therapy product candidates to meet commercial demand (assuming commercial approval is obtained), whether because of processing constraints or other disruptions, delays or difficulties that we experience, our production costs could dramatically increase and sales of the product and its long-term commercial prospects could be significantly damaged.

# The commercial potential and profitability of our products are unknown and subject to significant risk and uncertainty.

Even if we successfully develop and obtain regulatory approval for our cell therapy product candidates, the market may not understand or accept the products, which could adversely affect both the timing and level of future sales. Ultimately, the degree of market acceptance of our product candidates (or any of our future product candidates) will depend on a number of factors, including:

- the clinical effectiveness, safety and convenience of the product particularly in relation to alternative treatments;
- our ability to distinguish our products (which involve adult cells) from any ethical and political controversies associated with stem cell products derived from human embryonic or fetal tissue; and
- the cost of the product, the reimbursement policies of government and third-party payors and our ability to obtain sufficient third-party coverage or reimbursement.

Even if we are successful in achieving sales of our product candidates, it is not clear to what extent, if any, the products will be profitable. The costs of goods associated with production of cell therapy products are significant. In addition, some changes in manufacturing processes or procedures generally require FDA or foreign regulatory authority review and approval prior to implementation. We may need to conduct additional pre-clinical studies and clinical trials to support approval of any such changes. Furthermore, this review process could be costly and time-consuming and could delay or prevent the commercialization of product candidates.

# We may have difficulties in sourcing brown adipose (fat) tissue.

Our research agreement with the University of Utah (which expired in June 2015) provided an opportunity for us to obtain brown adipose (fat) tissue that we use to identify and characterize brown adipose derived stem cells for use in our pre-clinical *ThermoStem Program*. There is no certainty that we will be able to continue to collect brown adipose samples through relationships that we may establish with other potential sources of brown adipose tissue. The loss of brown tissue procurement would have a material adverse effect upon our ability to advance the *ThermoStem Program*.

We are required to complete a certain milestone or pay a certain royalty amount to maintain our exclusive license rights with regard to the disc/spine technology. The loss of such exclusive rights would have a material adverse effect upon us.

Pursuant to our license agreement with Regenerative Sciences, LLC, we must complete a certain milestone or pay a certain royalty amount in order to maintain our exclusive rights with regard to the disc/spine technology. No assurances can be given that we will achieve such milestone or have the funds, if necessary, to pay such royalty amount. Any loss of such exclusive rights would have a material adverse effect upon our business, results of operations and financial condition. See Item 1 ("Business - (b) Business - Disc/Spine Program-License").

# If safety problems are encountered by us or others developing new stem cell-based therapies, our stem cell initiatives could be materially and adversely affected.

The use of stem cells for therapeutic indications is still in the very early stages of development. If an adverse event occurs during clinical trials related to one of our proposed products and/or services or those of others, the FDA and other regulatory authorities may halt clinical trials or require additional studies. The occurrence of any of these events would delay, and increase the cost of, our development efforts and may render the commercialization of our proposed products and/or services impractical or impossible.

Ethical and other concerns surrounding the use of stem cell therapy may negatively impact the public perception of our stem cell products and/or services, thereby suppressing demand for our products and/or services.

Although our contemplated stem cell business pertains to adult stem cells only, and does not involve the more controversial use of embryonic stem cells, the use of adult human stem cells for therapy could give rise to similar ethical, legal and social issues as those associated with embryonic stem cells, which could adversely affect its acceptance by consumers and medical practitioners. Additionally, it is possible that our business could be negatively impacted by any stigma associated with the use of embryonic stem cells if the public fails to appreciate the distinction between adult and embryonic stem cells. Delays in achieving public acceptance may materially and adversely affect the results of our operations and profitability.

#### We are vulnerable to competition and technological change, and also to physicians' inertia.

We will compete with many domestic and foreign companies in developing our technology and products, including biotechnology, medical device and pharmaceutical companies. Many current and potential competitors have substantially greater financial, technological, research and development, marketing, and personnel resources. There is no assurance that our competitors will not succeed in developing alternative products and/or services that are more effective, easier to use, or more economical than those which we may develop, or that would render our products and/or services obsolete and non-competitive. In general, we may not be able to prevent others from developing and marketing competitive products and/or services similar to ours or which perform similar functions or which are marketed before ours.

Competitors may have greater experience in developing products, therapies 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.

We will compete against cell-based therapies derived from alternate sources, such as bone marrow, adipose tissue, umbilical cord blood and potentially embryos. Doctors historically are slow to adopt new technologies like ours, whatever the merits, when older technologies continue to be supported by established providers. Overcoming such inertia often requires very significant marketing expenditures or definitive product performance and/or pricing superiority.

We expect that physicians' inertia and skepticism will also be a significant barrier as we attempt to gain market penetration with our future products and services. We may need to finance lengthy time-consuming clinical studies (so as to provide convincing evidence of the medical benefit) in order to overcome this inertia and skepticism.

We may form or seek collaborations or strategic alliances or enter into additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements.

We may form or seek strategic alliances, create joint ventures or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute the shares of our existing stockholders, or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy.

Further, collaborations involving our product candidates, such as our collaborations with third-party research institutions, are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to the acquisition of competitive products, availability of funding, or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials, or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to their marketing and distribution;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our product candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the
  applicable product candidates; and
- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have
  the exclusive right to commercialize such intellectual property.

As a result, if we enter into collaboration agreements and strategic partnerships or license our products or businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction. Any delays in entering into new collaborations or strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition, and results of operations.

#### We have limited experience in the development and marketing of cell therapies and may be unsuccessful in our efforts to establish a profitable business.

Over the past six years, our business plan has been focused on capturing a piece of the burgeoning field of cell therapy. We have limited experience in the areas of cell therapy product development and marketing, and in the related regulatory issues and processes. Although we have recruited a team that has experience with designing and conducting clinical trials, as a company, we have limited experience in conducting clinical trials and no experience in conducting clinical trials through to regulatory approval of any product candidate. In part because of this lack of experience, we cannot be certain that planned clinical trials will begin or be completed on time, if at all. We cannot assure that we will successfully achieve our clinical development goals or fulfill our plans to capture a piece of the cell therapy market.

# Our cell therapy business is based on novel technologies that are inherently expensive, risky and may not be understood by or accepted in the marketplace, which could adversely affect our future value.

The clinical development, commercialization and marketing of cell and tissue-based therapies are at an early-stage, substantially research-oriented, and financially speculative. To date, very few companies have been successful in their efforts to develop and commercialize a cell therapy product. In general, cell-based or tissue-based products may be susceptible to various risks, including undesirable and unintended side effects, unintended immune system responses, inadequate therapeutic efficacy, or other characteristics that may prevent or limit their approval or commercial use. In addition, *BRTX-100* is a cell-based candidate that is produced by using a patient's own stem cells derived from bone marrow. Regulatory approval of novel product candidates such as *BRTX-100*, which is manufactured using novel manufacturing processes, can be more complex and expensive and take longer than other, more well-known or extensively studied pharmaceutical or biopharmaceutical products, due to the FDA's lack of experience with them. To our knowledge, the FDA has not yet approved a disc related stem cell therapy product. This lack of experience may lengthen the regulatory review process, require us to conduct additional studies or clinical trials, which would increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of these product candidates or lead to significant post-approval limitations or restrictions. Furthermore, the number of people who may use cell or tissue-based therapies is difficult to forecast with accuracy. Our future success is dependent on the establishment of a large global market for cell- and tissue-based therapies and our ability to capture a share of this market with our product candidates.

# Our cell therapy product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

With the enactment of the Biologics Price Competition and Innovation Act of 2009, or BPCIA, an abbreviated pathway for the approval of biosimilar and interchangeable biological products was created. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing reference product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original branded product is approved under a biologics license application, or BLA. Although the FDA has approved several biosimilar products, complex provisions of the law are still being implemented by the FDA and interpreted by the federal courts. As a result, the ultimate impact, implementation, and meaning of the BPCIA are still subject to some uncertainty and FDA actions and court decisions concerning the law could have a material adverse effect on the future commercial prospects for our biological products.

We believe that, if any of our product candidates are approved as a biological product under a BLA, it should qualify for the 12-year period of exclusivity. However, there is a risk that the FDA could permit biosimilar applicants to reference approved biologics other than our therapeutic candidates, thus circumventing our exclusivity and potentially creating the opportunity for competition sooner than anticipated. Additionally, this period of regulatory exclusivity does not apply to companies pursuing regulatory approval via their own traditional BLA, rather than via the abbreviated pathway. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

We may be subject to significant product liability claims and litigation, including potential exposure from the use of our product candidates in human subjects, and our insurance may be inadequate to cover claims that may arise.

Our business exposes us to potential product liability risks inherent in the testing, processing and marketing of cell therapy products. Such liability claims may be expensive to defend and result in large judgments against us. We face an inherent risk of product liability exposure related to the testing of our current and any future product candidates in human clinical trials and will face an even greater risk with respect to any commercial sales of our products should they be approved. No product candidate has been widely used over an extended period of time, and therefore safety data is limited. Cell therapy companies derive the raw materials for manufacturing of product candidates from human cell sources, and therefore the manufacturing process and handling requirements are extensive, which increases the risk of quality failures and subsequent product liability claims.

We will need to maintain insurance coverage adequate to cover our clinical trials and increase that coverage before commercializing product candidates, if ever. At any time during our clinical trials or after commercialization, if that occurs, we may not be able to obtain or maintain product liability insurance on acceptable terms with adequate coverage or at all, or if claims against us substantially exceed our coverage, then our financial position could be significantly impaired.

Whether or not we are ultimately successful in any product liability litigation that may arise, such litigation could consume substantial amounts of our financial and managerial resources, result in decreased demand for our products and injure our reputation.

We seek to maintain errors and omissions, directors and officers, workers' compensation and other insurance at levels we believe to be appropriate to our business activities. If, however, we were subject to a claim in excess of this coverage or to a claim not covered by our insurance and the claim succeeded, we would be required to pay the claim from our own limited resources, which could have a material adverse effect on our financial condition, results of operations and business. Additionally, liability or alleged liability could harm our business by diverting the attention and resources of our management and damaging our reputation.

Our internal computer systems, or those that are expected to be used by our clinical investigators, clinical research organizations or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of development programs for our product candidates.

We rely on information technology systems to keep financial records, maintain laboratory and corporate records, communicate with staff and external parties and operate other critical functions. Any significant degradation or failure of these computer systems could cause us to inaccurately calculate or lose data. Despite the implementation of security measures, these internal computer systems and those used by our clinical investigators, clinical research organizations, and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. The techniques that could be used by criminal elements or foreign governments to attack these computer systems are sophisticated, change frequently and may originate from less regulated and remote areas of the world. While we have not experienced any such system failure, theft of information, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our clinical development activities. For example, the loss of clinical trial data from historical or future clinical trials could result in delays in regulatory approval efforts and significantly increase costs to recover or reproduce the data. To the extent that any disruption, theft of information, or security breach were to result in a loss of or damage to data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the clinical development and the future development of our product candidates could be delayed.

# To operate and sell in international markets carries great risk.

We intend to market our products and services both domestically and in foreign markets. A number of risks are inherent in international transactions. In order for us to market our products and services in non-U.S. jurisdictions, we need to obtain and maintain required regulatory approvals or clearances in these countries and must comply with the country specific 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 operations and 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 services and products by increasing the price of our products and services in the currency of the countries in which the products and services are offered.

There can be no assurance that we will obtain regulatory approvals or clearances in all of the countries where we intend to market our products and services, 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 our products and services in various foreign markets. Delays in receipt of approvals or clearances to market our products and services 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.

Our inability to obtain reimbursement for our products and services from private and governmental insurers could negatively impact demand for our products and services.

Successful sales of health care products and services generally depends, in part, upon the availability and amounts of reimbursement from third party healthcare payor organizations, including government agencies, private healthcare insurers and other healthcare payors, such as health maintenance organizations and self-insured employee plans. Uncertainty exists as to the availability of reimbursement for such new therapies as stem cell-based therapies. There can be no assurance that such reimbursement will be available in the future at all or without substantial delay or, if such reimbursement is provided, that the approved reimbursement amounts will be sufficient to support demand for our products and services at a level that will be profitable.

#### Risks Related to Our Intellectual Property

# We may not be able to protect our proprietary rights.

Our commercial success will depend in large part upon our ability to protect our proprietary rights. There is no assurance, for example, that any additional patents will be issued to us or, if issued, that such patents will not become the subject of a re-examination, will provide us with competitive advantages, will not be challenged by any third parties, or that the patents of others will not prevent the commercialization of products and services incorporating our technology. Furthermore, there can be no guarantee that others will not independently develop similar products and services, duplicate any of our products and services, or design around any patents we obtain.

Our commercial success will also depend upon 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, services or processes, obtain licenses, or cease certain activities. If we are required in the future to obtain any licenses from third parties for some of our products and/or services, there can be no guarantee that we would be able to do so on commercially favorable terms, if at all. United States and foreign 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. Although we conducted a freedom to operate, or FTO, search on the licensed technology associated with our *Disc/Spine Program*, modifications made, and/or further developments that may be made, to that technology may not be covered by the initial FTO. No FTO has been undertaken with respect to our *ThermoStem* brown fat initiative.

Litigation, which would result in substantial costs to us and the diversion of effort on our part, 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. 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 U.S. Patent and Trademark Office, or the Patent Office, or a foreign patent office to determine priority of invention, which could result in substantial costs 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, re-examination 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 upon the patents of third parties, we may be subject to litigation, or otherwise prevented from commercializing potential products and/or services in the relevant jurisdiction, 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 and/or services, which could adversely affect our business and results of operations.

Furthermore, 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.

In addition to patents, we intend to also rely on unpatented trade secrets and proprietary technological expertise. Some of our intended future cell-related therapeutic products and/or services may fit into this category. We intend to rely, in part, on confidentiality agreements with our partners, employees, advisors, vendors, and consultants to protect our trade secrets and proprietary technological expertise. There can be no guarantee that these agreements will not be breached, or 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.

Failure to obtain or maintain patent protection, failure to protect trade secrets, 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 divert our efforts and attention from other aspects of our business and have a substantial negative effect on our results of operations and financial condition.

# We may not be able to protect our intellectual property in countries outside of the United States.

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.

#### Changes to United States patent law may have a material adverse effect on our intellectual property rights.

The Leahy-Smith America Invents Act, or AIA, which was signed into law in 2011, significantly changes United States patent law. It may take some time to establish what the law means, since it is just being interpreted by the lower courts, Federal Circuit Courts of Appeal, and the Supreme Court. The effects of these decisions are still not known. The first major change is that AIA switches the United States patent system from a "first to invent" system to a "first to file" system. Now that the first to file system is in effect, there is a risk that another company may independently develop identical or similar patents at approximately the same time, and be awarded the patents instead of us. Further, for the second major change, AIA abolished interference proceedings, and establishes derivation proceedings to replace interference proceedings in all cases in which the time period for instituting an interference proceeding has not lapsed where an inventor named in an earlier application derived the claimed invention from a named inventor. Now that the derivation proceedings are in effect, there is a risk that the inventorship of any pending patent application can be challenged for reasons of derivation. The third opposition will enable a person who is not the patent owner to initiate proceedings in the Patent Office within nine months after the grant of a patent that can result in cancellation of a patent as invalid. In addition to AIA, recent court decisions have created uncertainty with regard to our ability to obtain and maintain patents. Therefore there is a risk that any of our patents once granted may be subject to post-grant opposition, which will increase uncertainty on the validity of any newly granted patent or may ultimately result in cancellation of the patent.

In addition the Supreme Court has recently taken more limiting positions as to what constitutes patentable subject matter. As a result, many patents covering what were previously patentable inventions are now determined to cover inventions which are deemed non-statutory subject matter and are now invalid. As a result of this and subsequent opinions by the Court of Appeals for the Federal Circuit, the Patent Office is now applying more stringent limitations to claims in patent applications and is refusing to grant patents in areas of technology where patents were previously deemed available. Therefore there is a risk that we will be unable to acquire patents to cover our products and if such patents are granted they may subsequently be found to be invalid.

In certain countries, patent holders may be required to grant compulsory licenses, which would likely have a significant and detrimental effect on any future revenues in such country.

Many countries, including some countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, most countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may be limited to monetary relief and may be unable to enjoin infringement, which could materially diminish the value of the patent. Compulsory licensing of life-saving products is also becoming increasingly common in developing countries, either through direct legislation or international initiatives. Such compulsory licenses could be extended to our product candidates, which may limit our potential revenue opportunities, including with respect to any future revenues that may result from our product candidates.

#### Risks Related to Government Regulation

We operate in a highly-regulated environment and may be unable to comply with applicable federal, state, local, and international requirements. Failure to comply with applicable government regulation may result in a loss of licensure, registration, and approval or other government enforcement actions.

We intend to develop stem cell based therapeutic products and related device accessories. These products and operations are subject to regulation in the United States by the FDA, the FTC the CMS, state authorities and comparable authorities in foreign jurisdictions. Government regulation is a significant factor affecting the research, development, formulation, manufacture, and marketing of our products. If we fail to comply with applicable regulations, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, operating restrictions and criminal prosecution.

The FDA requires facilities that are engaged in the recovery, processing, storage, labeling, packaging, or distribution of human cells, tissues, cellular and tissue-based products, or HCT/Ps, or in the screening or testing of donors of HCT/Ps to register and list the HCT/Ps that it manufactures, comply with current Good Tissue Practices, or cGTPs, and other procedures to prevent the introduction, transmission, and spread of communicable diseases. Our New York-based laboratory and any treatment centers we may open in the United States may be required to comply with the HCT/P regulations. In addition, any third party retained by us that engages in the manufacture of an HCT/P on our behalf must also comply with the HCT/P regulations. If we or our third-party contractors fail to register, update registration information, or comply with any HCT/P regulation, we will be out of compliance with FDA regulations, which could adversely affect our business. Furthermore, adverse events in the field of stem cell therapy may result in greater governmental regulation, which could create increased expenses, potential delays, or otherwise affect our business.

We believe that some of our products and services may be regulated solely as HCT/Ps; however, it is possible that some or all of our products may be regulated as drugs, medical devices, and/or biological products and therefore will likely require FDA regulatory approval or clearance prior to being marketed in the United States. The FDA approval process can be lengthy, expensive, and uncertain and there is no guarantee of ultimate approval or clearance. Even if our products are approved, FDA regulation of promotional and manufacturing activities can affect our ability to market a drug, biologic or medical device. These products must comply with the applicable current Good Manufacturing Practices (for drug products), Quality System Regulations (for medical devices), or General Biological Product Standards (for biological products) as set forth in Title 21 of the Code of Federal Regulations. These regulations govern the manufacture, processing, packaging, and holding of the products. The FDA conducts inspections to enforce compliance with these regulations. We and any third-party contractor that manufactures these products on our behalf must comply with the applicable regulations. If we or any third party retained by us that engages in the manufacture of a drug, medical device, or biological product fails to comply with the applicable regulations, we will be out of compliance with FDA regulations, which could adversely affect our business. Discovery after FDA approval of previously unknown problems with a product, manufacturer or manufacturing process, or a failure to comply with regulatory requirements, may result in actions such as:

- warning letters or untitled letters or other actions requiring changes in product manufacturing processes or restrictions on product marketing or distribution;
- product recalls or seizures or the temporary or permanent withdrawal of a product from the market; and
- fines, restitution or disgorgement of profits or revenue, the imposition of civil penalties or criminal prosecution.

In addition, the FDA regulates and prescribes good laboratory practices, or GLPs, for conducting nonclinical laboratory studies that support applications for research or marketing permits for products regulated by the FDA. GLPs provide requirements for organization, personnel, facilities, equipment, testing, facilities operation, test and control articles, protocol for nonclinical laboratory study, records, reports, and disqualification by the FDA to ensure the quality and integrity of the safety data filed in research and marketing permits. Failure to comply with the GLPs could adversely affect our business.

The FTC regulates and polices advertising in the United States of medical treatments, procedures, and regimens that take place inside and outside of the United States. FTC regulations are designed to prevent unfair and deceptive practices and false advertising. The FTC requires advertisers and promoters to have a reasonable basis to substantiate and support claims. Failure to sufficiently substantiate and support claims can lead to enforcement action by the FTC, such as a disgorgement order of any profits made from the promoted business or an injunction from further violative promotion. Such enforcement actions could have an adverse effect on our business.

State and local governments impose additional licensing and other requirements for clinical laboratories and facilities that collect, process, and administer stem cells. Our laboratory and any future treatment facilities that we may operate in the United States must comply with these additional licensing and other requirements. The licensing regulations require personnel with specific education, experience, training, and other credentials. There can be no assurance that these individuals can be retained or will remain retained or that the cost of retaining such individuals will not materially and adversely affect our ability to operate our business profitably. There can be no assurance that we can obtain the necessary licensure required to conduct business in any state or that the cost of compliance will not adversely affect our ability to operate our business profitably.

CMS has authority to implement the Clinical Laboratories Improvement Amendments, or CLIA, program. When we begin laboratory operations in the United States, we will need to comply with the CLIA program standards. CLIA is designed to establish quality laboratory testing by ensuring the accuracy, reliability, and timeliness of patient test results. Laboratories that handle stem cells and other biologic matter are included under the CLIA program. Under the CLIA program, laboratories must be certified by the government, satisfy governmental quality and personnel standards, undergo proficiency testing, be subject to inspections, and pay fees. The failure to comply with CLIA standards could result in suspension, revocation, or limitation of a laboratory's CLIA certificate. In addition, fines or criminal penalties could also be levied. To the extent that our business activities require CLIA certification, we intend to obtain and maintain such certification. There is no guarantee that we will be able to gain CLIA certification. Failure to gain CLIA certification or comply with the CLIA requirements will adversely affect our business.

The Department of Health and Human Services, or HHS, published the Standards for Privacy of Individually Identifiable Health Information, or the Privacy Rule, and the Security Standards for the Protection of Electronic Protected Health Information, or the Security Rule, pursuant to the Health Insurance Portability and Accountability Act, or HIPAA. The Privacy Rule specifies the required, permitted and prohibited uses and disclosures of an individual's protected health information by health plans, health care clearinghouses, and any health care provider that transmits health information in electronic format (referred to as covered entities). The Security Rule establishes a national security standard for safeguarding protected health information that is held or transferred in electronic form (referred to as electronic protected health information). The Security Rule addresses the technical and non-technical safeguards that covered entities must implement to secure individuals' electronic protected health information.

In addition to covered entities, the Health Information Technology for Economic and Clinical Health Act, or the HITECH Act, made certain provisions of the Security Rule, as well as the additional requirements the HITECH Act imposed that relate to security and privacy and that are imposed on covered entities, directly applicable as a matter of law to individuals and entities that perform permitted functions on behalf of covered entities when those functions involve the use or disclosure of protected health information. These individuals and entities are referred to as business associates. Covered entities are required to enter into a contract with business associates, called a business associate agreement, that also imposes many of the Privacy Rule requirements on business associates as a matter of contract.

Regulations implementing the majority of the requirements created by the HITECH Act were issued in January 2013 (we refer to these regulations as the Final Rule). Among other things, the Final Rule broadened the definition of business associate to include subcontractors. As a result, a subcontractor who performs tasks involving the use or disclosure of protected health information on behalf of a business associate must likewise comply with the same obligations as the business associate.

The HITECH Act also established notification requirements in the event that a breach of the protected health information occurs at a covered entity or business associate. These notification obligations mandate that each affected individual whose protected health information was impermissibly accessed receive written notification mailed to his residence of record and that the Secretary of HHS and potentially the media also be notified. HHS, through its Office for Civil Rights, investigates breach reports and determines whether administrative or technical modifications are required and whether civil or criminal sanctions should be imposed. Companies failing to comply with HIPAA and the implementing regulations may also be subject to civil money penalties or in the case of knowing violations, potential criminal penalties, including monetary fines, imprisonment, or both. In some cases, the State Attorneys General may seek enforcement and appropriate sanctions in federal court.

To the extent that our business requires compliance with HIPAA, we intend to fully comply with all requirements as well as to other additional federal or state privacy laws and regulations that may apply to us. As HIPAA is amended and changed, we will incur additional compliance burdens. We may be required to spend substantial time and money to ensure compliance with ever-changing federal and state standards as electronic and other means of transmitting protected health information evolve.

In addition to the above-described regulation by United States federal and state government, the following are other federal and state laws and regulations that could directly or indirectly affect our ability to operate the business:

- state and local licensure, registration, and regulation of the development of pharmaceuticals and biologics;
- state and local licensure of medical professionals;
- state statutes and regulations related to the corporate practice of medicine;
- laws and regulations administered by U.S. Customs and Border Protection related to the importation of biological material into the United States;
- other laws and regulations administered by the FDA;
- other laws and regulations administered by HHS;
- state and local laws and regulations governing human subject research and clinical trials;
- the federal physician self-referral prohibition, also known as Stark Law, and any state equivalents to Stark Law;
- the federal Anti-Kickback Statute and any state equivalent statutes and regulations;
- federal and state coverage and reimbursement laws and regulations;
- state and local laws and regulations for the disposal and handling of medical waste and biohazardous material;
- Occupational Safety and Health Administration, or OSHA, regulations and requirements;
- the Intermediate Sanctions rules of the IRS providing for potential financial sanctions with respect to "excess benefit transactions" with tax-exempt organizations;
- the Physician Payments Sunshine Act (in the event that our products are classified as drugs, biologics, devices or medical supplies and are reimbursed by Medicare, Medicaid or the Children's Health Insurance Program); and
- state and other federal laws governing the privacy of health information.

Any violation of these laws could result in a material adverse effect on our business.

In the event we determine to operate in foreign jurisdictions, we will need to comply with the government regulations of each individual country in which any therapy centers that we may establish are located and 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. 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 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 technology products. We have not yet thoroughly explored the applicable laws and regulations that we will need to comply with in foreign jurisdictions. It is possible that we may not be permitted to expand our business into one or more foreign jurisdictions.

We intend to conduct our business in full compliance with all applicable federal, state and local, and foreign laws and regulations. However, the laws and regulations affecting our business are complex, often are not contemplated by existing legal régimes, and are subject to change without notice. As a result, the laws and regulations affecting our business are uncertain and have not been the subject of judicial or regulatory interpretation. Furthermore, stem cells and cell therapy are topics of interest in the government and public arenas. There can be no guarantee that laws and regulations will not be implemented, amended and/or reinterpreted in a way that will negatively affect our business. Likewise, there can be no assurance that we will be able, or will have the resources, to maintain compliance with all such healthcare laws and regulations. Failure to comply with such healthcare laws and regulations, as well as the costs associated with such compliance or with enforcement of such healthcare laws and regulations, may have a material adverse effect on our operations or may require restructuring of our operations or impair our ability to operate profitably.

### The failure to receive regulatory approvals for our cell therapy product candidates would likely have a material and adverse effect on our business and prospects.

To date, we have not received regulatory approval to market any of our product candidates in any jurisdiction. If we seek approval of any of our cell therapy product candidates, we will be required to submit to the FDA and potentially other regulatory authorities extensive pre-clinical and clinical data supporting its safety and efficacy, as well as information about the manufacturing process and to undergo inspection of our manufacturing facility or other contract manufacturing facilities, among other things. The process of obtaining FDA and other regulatory approvals is expensive, generally takes many years and is subject to numerous risks and uncertainties, particularly with complex and/or novel product candidates such as our cell-based product candidates. Changes in regulatory approval requirements or policies may cause delays in the approval or rejection of an application or may make it easier for our competitors to gain regulatory approval to enter the marketplace. Ultimately, the FDA and other regulatory agencies have substantial discretion in the approval process and may refuse to accept any application or may decide that our product candidate data are insufficient for approval without the submission of additional preclinical, clinical or other studies. In addition, varying agency interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any difficulties or failures that we encounter in securing regulatory approval for our product candidates would likely have a substantial adverse impact on our ability to generate product sales, and could make any search for a collaborative partner more difficult. Similarly, any regulatory approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If we are unable to conduct clinical studies in accordance with regulations and accepted standards, we may be delayed in receiving, or may never receive, regulatory approvals of our product candidates from the FDA and other regulatory authorities.

To obtain marketing approvals for our product candidates in the United States and abroad, we must, among other requirements, complete adequate and well-controlled clinical trials sufficient to demonstrate to the FDA and other regulatory bodies that the product candidate is safe and effective for each indication for which approval is sought. If the FDA finds that patients enrolled in the trial are or would be exposed to an unreasonable and significant risk of illness or injury, due to, among other things, occurrence of a serious adverse event in an ongoing clinical trial, the FDA can place one or more of our clinical trials on hold. If safety concerns develop, we may, or the FDA or an institutional review board may require us to, stop the affected trials before completion.

The completion of our clinical trials also may be delayed or terminated for a number of other reasons, including if:

- third-party clinical investigators do not perform the clinical trials on the anticipated schedule or consistent with the clinical trial protocol, good clinical practices required by the FDA and other regulatory requirements, or other third parties do not perform data collection and analysis in a timely or accurate manner;
- inspections of clinical trial sites by the FDA or other regulatory authorities reveal violations that require us to undertake corrective action, suspend or terminate one or more sites, or prohibit use of some or all of the data in support of marketing applications; or
- the FDA or one or more institutional review boards suspends or terminates the trial at an investigational site, or precludes enrollment of additional subjects.

Our development costs will increase if there are material delays in our clinical trials, or if we are required to modify, suspend, terminate or repeat a clinical trial. If we are unable to conduct our clinical trials properly, we may never receive regulatory approval to market our product candidates.

#### Health care companies have been the subjects of federal and state investigations, and we could become subject to investigations in the future.

Both federal and state government agencies have heightened civil and criminal enforcement efforts. There are numerous ongoing investigations of health care companies, as well as their executives and managers. In addition, amendments to the federal False Claims Act, or FCA, including under healthcare reform legislation, have made it easier for private parties to bring "qui tam" (or whistleblower) lawsuits against companies under which the whistleblower may be entitled to receive a percentage of any money paid to the government. The FCA provides, in part, that an action can be brought against any person or entity that has knowingly presented, or caused to be presented, a false or fraudulent request for payment from the federal government, or who has made a false statement or used a false record to get a claim approved. The government has taken the position that claims presented in violation of the federal anti-kickback law, Stark Law or other healthcare-related laws, including laws enforced by the FDA, may be considered a violation of the FCA. Penalties include substantial fines for each false claim, plus three times the amount of damages that the federal government sustained because of the act of that person or entity and/or exclusion from the Medicare program. In addition, a majority of states have adopted similar state whistleblower and false claims provisions.

We are not aware of any government investigations involving any of our facilities or management. While we believe that we are in material compliance with applicable governmental healthcare laws and regulations, any future investigations of our business or executives could cause us to incur substantial costs, and result in significant liabilities or penalties, as well as damage to our reputation.

It is uncertain to what extent the government, private health insurers and third-party payors will approve coverage or provide reimbursement for the therapies and products to which our services relate. Availability for such reimbursement may be further limited by reductions in Medicare and Medicaid funding in the United States.

To the extent that health care providers cannot obtain coverage or reimbursement for our products and therapies, they may elect not to provide such products and therapies to their patients and, thus, may not need our services. Further, as cost containment pressures are increasing in the health care industry, government and private payors may adopt strategies designed to limit the amount of reimbursement paid to health care providers.

Similarly, the trend toward managed health care and bundled pricing for health care services in the United States, could significantly influence the purchase of healthcare products and services, resulting in lower prices and reduced demand for our therapeutic products under development.

We may receive a portion of our revenues from services rendered to patients enrolled in federal health care programs, such as Medicare, and we may also directly or indirectly receive revenues from federal health care programs. Federal health care programs are subject to changes in coverage and reimbursement rules and procedures, including retroactive rate adjustments. These contingencies could materially decrease the range of services covered by such programs or the reimbursement rates paid directly or indirectly for our products and services. To the extent that any health care reform favors the reimbursement of other therapies over our therapeutic products under development, such reform could affect our ability to sell our services, which may have a material adverse effect on our revenues.

The limitation on reimbursement available from private and government payors may reduce the demand for, or the price of, our products and services, which could have a material adverse effect on our revenues. Additional legislation or regulation relating to the health care industry or third-party coverage and reimbursement may be enacted in the future which could adversely affect the revenues generated from the sale of our products and services.

Furthermore, there has been a trend in recent years towards reductions in overall funding for Medicare and Medicaid. There has also been an increase in the number of people who are not eligible for or enrolled in Medicare, Medicaid or other governmental programs. The reduced funding of governmental programs could have a negative impact on the demand for our services to the extent it relates to products and services which are reimbursed by government and private payors.

### Unintended consequences of healthcare reform legislation in the United States may adversely affect our business.

The healthcare industry is undergoing fundamental changes resulting from political, economic and regulatory influences. In the United States, comprehensive programs are under consideration that seek to, among other things, increase access to healthcare for the uninsured and control the escalation of healthcare expenditures within the economy. In 2010, healthcare reform legislation was signed into law. While we do not believe this legislation will have a direct impact on our business, the legislation requires the adoption of implementing regulations, which may have unintended consequences or indirectly impact our business. For instance, the scope and implications of the amendments pursuant to the Fraud Enforcement and Recovery Act of 2009, or FERA, have yet to be fully determined or adjudicated and as a result it is difficult to predict how future enforcement initiatives may impact our business. If the legislation causes such unintended consequences or indirect impact, it could have a material adverse effect on our business, financial condition and results of operations.

Competitor companies or hospitals may be able to take advantage of European Union, or EU, rules permitting sales of unlicensed medicines for individual patients to sell competing products without a marketing authorization.

The EU medicines rules allow individual member states to permit the supply of a medicinal product without a marketing authorization to fulfill special needs, where the product is supplied in response to a bona fide unsolicited order, formulated in accordance with the specifications of a healthcare professional and for use by an individual patient under his direct personal responsibility. This may in certain countries also apply to products manufactured in a country outside the EU and imported to treat specific patients or small groups of patients. In addition, advanced therapy medicinal products do not need a marketing authorization if they are prepared on a non-routine basis and are used within the same EU member state in a hospital in accordance with a medical prescription for an individual patient.

These exemptions could allow our competitors to make sales in the EU without having obtained a marketing authorization and without undergoing the expense of clinical trials, especially if those competitors have cell processing facilities in the relevant EU member state. Similarly, certain hospitals may be able to compete with us on the basis of these rules.

#### Risks Related to Our Common Stock

## We pay no dividends.

We have never paid cash dividends in the past, and currently do not intend to pay any cash dividends in the foreseeable future.

# There is at present only a limited market for our common stock and there is no assurance that an active trading market for our common stock will develop.

Although our common stock is quoted on the OTCQB market from time to time, the market for our common stock is extremely limited. Trading prices and volumes on the OTCQB market are thin and erratic. We cannot predict at what price our shares will trade and there can be no assurance that an active market for our shares will develop or, if developed, will be sustained. The volume traded at any one time can be limited, and as a result, there may not be a liquid trading market for our shares. In addition, although there have been market makers in our shares, we cannot assure that these market makers will continue to make a market in our shares or that other factors outside of our control will not cause them to stop market making in our shares. Making a market in shares involves maintaining bid and ask quotations and being able to effect transactions in reasonable quantities at those quoted prices, subject to various securities laws and other regulatory requirements. Furthermore, the development and maintenance of a public trading market depends upon the existence of willing buyers and sellers, the presence of which is not within our control or that of any market maker. Market makers are not required to maintain a continuous two-sided market, are required to honor firm quotations for only a limited number of shares, and are free to withdraw firm quotations at any time. Even with a market maker, factors such as our past losses from operations and the small size of our company mean that there can be no assurance of an active and liquid market for our shares developing in the foreseeable future. Even if a market develops, we cannot assure that a market will continue, or that stockholders will be able to resell their shares at any price.

# Our common stock is classified as a "penny stock"; the restrictions of the penny stock regulations of the Securities and Exchange Commission, or SEC, may result in less liquidity for our common stock.

The SEC has adopted regulations which define a "penny stock" to be any equity security that has a market price (as therein defined) of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. Based upon the last reported sale price of our common stock on the OTCQB market on March 15, 2017, as of such date, our common stock was a "penny stock". For any transactions involving a penny stock, unless exempt, the rules require the delivery, prior to any transaction involving a penny stock by a retail customer, of a disclosure schedule prepared by the SEC relating to the penny stock market. Disclosure is also required to be made about commissions payable to both the broker/dealer and the registered representative and current quotations for the securities. Finally, monthly statements are required to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks. If the market price for shares of our common stock remains below \$5.00, and we do not satisfy any of the exceptions to the SEC's definition of penny stock, our common stock will continue to be classified as a penny stock. If such classification should remain in place, as a result of the penny stock restrictions, brokers or potential investors may be reluctant to trade in our securities, which may result in less liquidity for our common stock.

#### Because state securities laws may limit secondary trading, stockholders may be restricted as to the states in which they can sell their shares.

Because state securities laws may limit secondary trading, stockholders may be restricted as to the states in which they can sell their shares. Stockholders may not be able to resell them in any state unless and until the shares are qualified for secondary trading under the applicable securities laws of such state or there is confirmation that an exemption, such as listing in certain recognized securities manuals, is available for secondary trading in such state. There can be no assurance that we will be successful in registering or qualifying our shares for secondary trading, or identifying an available exemption for secondary trading in such shares in every state. If we fail to register or qualify, or to obtain or verify an exemption for the secondary trading of, our shares in any particular state, the shares could not be offered or sold to, or purchased by, a resident of that state. In the event that a significant number of states refuse to permit secondary trading in our shares, the market for the shares will be limited, which could drive down the market price of the shares and reduce the liquidity of the shares and a stockholder's ability to resell the shares at all or at current market prices.

# Stockholders who hold unregistered shares of our common stock are subject to resale restrictions pursuant to Rule 144 due to our former status as a "shell company".

We previously were a "shell company" pursuant to Rule 144, promulgated under the Securities Act of 1933, as amended, or Rule 144, and, as such, sales of our securities pursuant to Rule 144 cannot be made unless, among other things, we continue to remain subject to Section 13 or 15(d) of the Securities Exchange Act of 1934, or the Exchange Act, and we file all of our required periodic reports with the SEC under the Exchange Act. Because our unregistered securities cannot be sold pursuant to Rule 144 unless we continue to meet such requirements, any unregistered securities we sell in the future or issue to consultants or employees, in consideration for services rendered or for any other purpose, will have no liquidity unless we continue to comply with such requirements. As a result, it may be more difficult for us to obtain financing to fund our operations and pay our consultants and employees with our securities instead of cash.

# We have incurred, and will continue to incur, increased costs as a result of being an SEC reporting company.

The Sarbanes-Oxley Act of 2002, as well as a variety of related rules implemented by the SEC, have required changes in corporate governance practices and generally increased the disclosure requirements of public companies. As a reporting company, we incur significant legal, accounting and other expenses in connection with our public disclosure and other obligations. Based upon SEC regulations currently in effect, we are required to establish, evaluate and report on our internal control over financial reporting. We believe that compliance with the myriad of rules and regulations applicable to reporting companies and related compliance issues will require a significant amount of time and attention from our management.

# Our stock price may fluctuate significantly and be highly volatile and this may make it difficult for a stockholder to resell shares of our common stock at the volume, prices and times the stockholder finds attractive.

The market price of our common stock could be subject to significant fluctuations and be highly volatile, which may make it difficult for a stockholder to resell shares of our common stock at the volume, prices and times the stockholder finds attractive. There are many factors that will impact our stock price and trading volume, including, but not limited to, the factors listed above under "Risks Related to Our Business Generally", "Risks Related to Our Cell Therapy Product Development Efforts", "Risks Related to Our Intellectual Property", "Risks Related to Government Regulation", and "Risks Related to Our Common Stock."

Stock markets, in general, experience significant price and volume volatility, and the market price of our common stock may continue to be subject to such market fluctuations that may be unrelated to our operating performance and prospects. Increased market volatility and fluctuations could result in a substantial decline in the market price of our common stock.

There may be future issuances or resales of our common stock which may materially and adversely dilute stockholders' ownership interest and affect the market price of our common stock.

We are not restricted from issuing additional shares of our common stock in the future, including securities convertible into, or exchangeable or exercisable for, shares of our common stock. Our issuance of additional shares of common stock in the future will dilute the ownership interests of our then existing stockholders.

We have effective registration statements on Form S-8 under the Securities Act registering an aggregate of 4,250,000 shares of our common stock issuable under our 2010 Equity Participation Plan. Options to purchase 2,168,950 shares of our common stock are outstanding under the plan. In addition, 45,000 shares of common stock were issued as restricted stock grant pursuant to the plan. 2,036,050 shares are reserved for future grants under the plan. The shares issuable pursuant to the registration statements on Form S-8 will be freely tradable in the public market, except for shares held by affiliates.

The sale of a substantial number of shares of our common stock or securities convertible into, or exchangeable or exercisable for, shares of our common stock, whether directly by us in this offering or future offerings or by our existing stockholders in the secondary market, the perception that such issuances or resales could occur or the availability for future issuances or resale of shares of our common stock or securities convertible into, or exchangeable or exercisable for, shares of our common stock could materially and adversely affect the market price of our common stock and our ability to raise capital through future offerings of equity or equity-related securities on attractive terms or at all

In addition, our Board of Directors is authorized to designate and issue preferred stock without further stockholder approval, and we may issue other equity and equity-related securities that are senior to our common stock in the future for a number of reasons, including, without limitation, to support operations and growth, and to comply with any future changes in regulatory standards.

Anti-takeover provisions and the regulations to which we may be subject may make it more difficult for a third party to acquire control of us, even if the change in control would be beneficial to our stockholders.

We are incorporated in Delaware. Anti-takeover provisions in Delaware law and our certificate of incorporation and bylaws could make it more difficult for a third party to acquire control of us and may prevent stockholders from receiving a premium for their shares of common stock. Our certificate of incorporation provides that our Board of Directors may issue up to 5,000,000 shares of preferred stock, in one or more series, without stockholder approval and with such terms, preferences, rights and privileges as the Board of Directors may deem appropriate. These provisions and other factors may hinder or prevent a change in control, even if the change in control would be beneficial to, or sought by, our stockholders.

Although we believe that we have complied with state securities laws in all material respects, claims may be made that certain of our securities may have been issued in violation of such laws.

Since our inception, we have not generated significant revenues from our operations and have funded our operations through the sale of our equity securities and debt securities. These securities were issued by us in isolated transactions not involving a public offering. For each of these transactions, we relied on specific exemptions and safe harbors from the registration requirements of the Securities Act in connection with the offer and sale of such securities under the SEC's rules and regulations, including Section 4(a)(2) of the Securities Act as transactions by an issuer not involving a public offering, Section 3(a)(9) of the Securities Act as securities exchanged by the issuer with its existing security holders exclusively where no commission or other remuneration was paid or given directly or indirectly for soliciting such exchange, and/or Rule 506 of Regulation D of the Securities Act as transactions not involving any public offering. For each such transaction, we did not engage in any general solicitation or advertising to offer or sell any of the securities, the securities were offered by us to a limited number of persons, the investors had access to information regarding us (including information contained in our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K filed with the SEC, and press releases made by us), and we disclosed to prospective investors that we were available to answer questions prior to any purchase. Each investor represented to us that, at the time of its acquisition of its securities from us, it was an accredited investor, as such term is defined under the Securities Act. Accordingly, we believe that the issuances of our securities was not subject to any filing, qualification and/or registration requirements of any state blue sky securities commissions (other than pursuant to certain notification and filing fee requirements). We may have not complied with certain of such notification and filing fee requirements with regard to a substantial portion of the sales of our securities made by us. In addition, certain state securities commissions may claim that we were subject to filing requirements (in addition to the notification and filing fee requirements referred to above) with regard to a substantial portion of the sales of our securities made by us. Although we do not believe that our failure to file notifications or pay fees to or with certain state securities commissions will result in an obligation to offer rescission rights to any such purchaser, and we believe that filing, registration and/or qualification requirements (in addition to the notification and filing fee requirements set forth above) do not apply, claims to such effect may be made by state blue sky regulators and/or individual purchasers. These claims could result in state blue sky regulators commencing enforcement actions against us and/or seeking monetary damages in addition to rescission rights, or individual investors seeking rescission rights and/or additional damages. If we are required to offer rescission rights, in addition to the requirement to offer to repurchase securities for the purchase price paid for such securities by investors, we also could be required to pay interest from the date of issuance, other expenses, penalties and/or other amounts. Moreover, if we were required to offer rescission rights, we may not have sufficient funds to repurchase the securities that are the subject of the rescission offer. Any such claims (whether by state blue sky securities regulators and/or individual purchasers) may result in substantial costs to us including, but not limited to, legal fees and expenses and the diversion of management efforts on our part.

In the event that a significant amount of our outstanding debt is converted into equity, the percentage ownership of existing stockholders will be substantially diluted.

As of March 15, 2017, we had outstanding indebtedness in the amount of \$2,179,563. We intend to seek to have the debtholders convert all or a significant amount of such debt into equity. In the event of any such conversion, the percentage ownership of existing stockholders will be substantially diluted.

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

Not applicable.

# ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The financial statements required by this Item 8 are included in this Annual Report following Item 16 hereof. As a smaller reporting company, we are not required to provide supplementary financial information.

# ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

# ITEM 9A. CONTROLS AND PROCEDURES.

# **Disclosure Controls and Procedures**

Disclosure controls are procedures that are designed with the objective of ensuring that information required to be disclosed in our reports filed under the Exchange Act, such as this Annual Report, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls are also designed with the objective of ensuring that such information is accumulated and communicated to our management, including the Principal Executive and Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Internal controls are procedures which are designed with the objective of providing reasonable assurance that (1) our transactions are properly authorized, recorded and reported; and (2) our assets are safeguarded against unauthorized or improper use, to permit the preparation of our consolidated financial statements in conformity with United States generally accepted accounting principles.

In connection with the preparation of this Annual Report, management, with the participation of our Principal Executive and Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)). Based upon that evaluation, our Principal Executive and Financial Officer concluded that, as of December 31, 2016, our disclosure controls and procedures were effective.

## **Internal Control over Financial Reporting**

# Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, our Principal Executive and Financial Officer, and effected by the 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 U.S. GAAP including those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and the disposition of our assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP and that receipts and expenditures are being made only in accordance with authorizations of our management and Board of Directors, and (iii) 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 policies and procedures may deteriorate.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the 2013 framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

# **Changes in Internal Controls**

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### **Limitations of the Effectiveness of Control**

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations of any control system, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected

### No Attestation Report of Registered Public Accounting Firm

This Annual Report does not contain an attestation report of our independent registered public accounting firm regarding internal control over financial reporting since the rules for smaller reporting companies provide for this exemption.

# ITEM 9B. OTHER INFORMATION.

None.

#### PART III

# ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

#### **Directors and Executive Officers**

Information regarding our directors and executive officers is set forth below. Each of our officers devotes his or her full business time in providing services on our behalf.

Name	Age	Positions Held
Mark Weinreb	64	Chief Executive Officer, President and Chairman of the Board
Edward L. Field	52	President, Disc/Spine Division
Francisco Silva	42	Vice President of Research and Development
Mandy D. Clyde	35	Vice President of Operations and Secretary
Robert B. Catell	80	Director
John M. Desmarais	53	Director
A. Jeffrey Radov	65	Director
Charles S. Ryan	52	Director
Paul Jude Tonna	58	Director

#### Mark Weinreb

Mark Weinreb has served as our Chief Executive Officer since October 2010, as our President since February 2012 and as our Chairman of the Board since April 2011. From February 2003 to October 2009, Mr. Weinreb served as President of NeoStem, Inc. (now known as Caladrius Biosciences, Inc.), a public international biopharmaceutical company engaged in, among other things, adult stem cell-related operations. From October 2009 to October 2010, he was subject to a non-competition agreement with NeoStem and was not engaged in business. Mr. Weinreb also served as Chief Executive Officer and Chairman of the Board of Directors of NeoStem from February 2003 to June 2006. In 1976, Mr. Weinreb joined Bio Health Laboratories, Inc., a state-of-the-art medical diagnostic laboratory providing clinical testing services for physicians, hospitals, and other medical laboratories. He became the laboratory administrator in 1978 and then an owner and the laboratory's Chief Operating Officer in 1982. In such capacity, he oversaw all technical and business facets, including finance and laboratory science technology. Mr. Weinreb left Bio Health Laboratories in 1989 when the business was sold. In 1992, Mr. Weinreb founded Big City Bagels, Inc., a national chain of franchised upscale bagel bakeries and became Chairman and Chief Executive Officer of such entity. Big City Bagels went public in 1995, and in 1999 Mr. Weinreb redirected the company and completed a merger with an Internet service provider. From 2000 to 2002, Mr. Weinreb served as Chief Executive Officer of Jestertek, Inc. (now known as Gesturetek, Inc.), a software development company pioneering gesture recognition and control using advanced interactive proprietary video technology. Mr. Weinreb received a Bachelor of Arts degree from Northwestern University and a Master of Science degree in Medical Biology from C.W. Post, Long Island University. We believe that Mr. Weinreb's executive-level management experience, his extensive experience in the adult stem cell sector and his se

#### Edward L. Field

Edward L. Field has served as President of our Disc/Spine Division since February 2015. Mr. Field served as Chief Operating Officer of Cytomedix, Inc. (now known as Nuo Therapeutics, Inc.), a regenerative therapies marketing and development company, from February 2012 to June 2014. From November 2004 to March 2010, Mr. Field served as President and Chief Operating Officer of Aldagen, Inc., a biotechnology company acquired by Cytomedix. From March 2010 to November 2010, he served as Aldagen's Chief Business Officer. From November 2010 to February 2012, Mr. Field served as Aldagen's Chief Operating Officer. From 2002 to September 2004, Mr. Field was President and Chief Executive Officer of Inologic, Inc., a biopharmaceutical company. From 1999 to 2002, he was President of Molecumetics, Ltd., a drug discovery and development subsidiary of Tredegar Corporation, until its merger with Therics, LLC, a regenerative medicine company. Mr. Field received a Master of Business Administration degree from the University of Virginia's Darden School of Business Administration and a Bachelor of Arts degree in Economics from Duke University.

### Francisco Silva

Francisco Silva has served as our Vice President of Research and Development since March 2013, having also previously served in such position from April 2011 until March 2012. He served as our Research Scientist from March 2012 to June 2012 and as our Chief Scientist from June 2012 to March 2013. From 2007 to 2011, Mr. Silva served as Chief Executive Officer of DV Biologics LLC, and as President of DaVinci Biosciences, LLC, companies engaged in the commercialization of human based biologics for both research and therapeutic applications. From 2003 to 2007, Mr. Silva served as Vice President of Research and Development for PrimeGen Biotech LLC, a company engaged in the development of cell based platforms. From 2002 to 2003, he was a Research Scientist with PrimeGen Biotech and was responsible for the development of experimental designs that focused on germ line reprogramming stem cell platforms. Mr. Silva has taught courses in biology, anatomy and advanced tissue culture at California State Polytechnic University. He has obtained a number of patents relating to stem cells and has had numerous articles published with regard to stem cell research. Mr. Silva graduated from California State Polytechnic University with a degree in Biology. He also obtained a Graduate Presidential Fellowship and MBRS Fellowship from California State Polytechnic University.

## Mandy D. Clyde

Mandy D. Clyde has been our Vice President of Operations since August 2009. She has served as our Secretary since December 2010 and served on our Board from September 2010 to April 2011. From 2006 to 2009, Ms. Clyde served as Educational Envoy and then CME/CE Coordinator for Professional Resources in Management Education, an accredited provider of continuing medical education. She conducted needs assessments nationally to determine in which areas clinicians most needed current education. She also oversaw onsite educational meetings and analyzed data for outcomes reporting. From 2005 to 2006, Ms. Clyde served as surgical coordinator for Eye Surgery Associates and the Rand Eye Institute, two prominent physician practices in Florida. Ms. Clyde has experience in medical editing for educational programs and is a published author of advanced scientific and clinical content on topics including Alzheimer's disease, breast cancer, sleep apnea and adult learning. She received a degree in Biology from Mercyhurst College.

#### Robert B. Catell

Robert B. Catell became a member of our Board of Directors in February 2016. Mr. Catell served as Chairman and Chief Executive Officer of KeySpan Corporation and KeySpan Energy Delivery, the former Brooklyn Union Gas, from 1998 to 2007. His career with Brooklyn Union Gas started in 1958. Following National Grid's acquisition of KeySpan Corporation in 2007, Mr. Catell became Chairman of National Grid, U.S. and Deputy Chairman of National Grid plc. Mr. Catell currently serves as Chairman of the Board of the Advanced Energy Research and Technology Center (AERTC) at Stony Brook University, New York State Smart Grid Consortium, Cristo Rey Brooklyn High School, Futures in Education Endowment Fund, and the New York Energy Policy Institute's Advisory Council (NYEPI). He also serves on the NYS Economic Development Power Allocation Board (EDPAB) and the Board of Directors of Applied DNA Sciences, Inc., a company that uses biotechnology as a forensic foundation in creating unique security solutions addressing the challenges of modern commerce. In addition, Mr. Catell serves as a board member of a number of other business, governmental and not-for-profit organizations. Mr. Catell holds both a Master's and Bachelor's degree in Mechanical Engineering from City College of New York. We believe that Mr. Catell's executive-level management experience and his extensive experience in the Long Island community give him the qualifications and skills to serve as one of our directors.

#### John M. Desmarais

John M. Desmarais became a member of our Board of Directors in December 2015. Mr. Desmarais is the founding partner of Desmarais LLP, an intellectual property trial boutique established in 2010, and the founder and owner of Round Rock Research LLC, a patent licensing company. From 1997 to 2009, he was a partner at the international law firm of Kirkland & Ellis LLP and served as a member of the firm's Management Committee from 2004 to 2009. Prior to joining Kirkland, and after practicing in the area of intellectual property litigation and counseling for several years, he left private practice to serve as an Assistant United States Attorney in the Southern District of New York, where for three years he represented the federal government in criminal jury trials. Mr. Desmarais is a member of the bars of New York and Washington, D.C., the United States Supreme Court, the Federal Circuit Court of Appeals, and various other federal district courts and courts of appeal. He is also registered to practice before the United States Patent and Trademark Office. Mr. Desmarais has been recognized by numerous publications as one of the nation's leading intellectual property litigators. Mr. Desmarais obtained a degree in Chemical Engineering from Manhattan College and a law degree from New York University. We believe that Mr. Desmarais' business and legal experience, including his extensive experience in the area of intellectual property, give him the qualifications and skills to serve as one of our directors.

#### A. Jeffrey Radov

A. Jeffrey Radov became a member of our Board and Chair of our Audit Committee in April 2011. Mr. Radov is an entrepreneur and businessman with more than 35 years of experience in media, communications and financial endeavors. Since 2002, he has served as the Managing Partner of Walworth Group, which provides consulting and advisory services to a variety of businesses, including hedge funds, media, entertainment and Internet companies, financial services firms and early stage ventures. Mr. Radov is also an advisor to GeekVentures, LLC, an incubator for technology startups in Israel. From 2008 to 2010, Mr. Radov was a Principal and Chief Operating Officer at Aldebaran Investments, LLC, a registered investment advisor. From 2005 to 2008, Mr. Radov was Chief Operating Officer at EagleRock Capital Management, a group of hedge funds. Prior to joining EagleRock, Mr. Radov was a founding investor in and Board member of Edusoft, Inc., an educational software company. From 2001 to 2002, Mr. Radov was a Founder-in-Residence at SAS Investors, an early-stage venture fund. From 1999 to 2001, Mr. Radov was CEO and co-founder of VocaLoca, Inc., an innovator in consumergenerated audio content on the Internet. Mr. Radov was a founding executive of About.Com, Inc., an online information source, and was its EVP of Business Development and Chief Financial Officer from its inception. In 1996, prior to founding About.Com, Mr. Radov was a Director at Prodigy Systems Company, a joint venture of IBM and Sears. Mr. Radov was also a principal in the management of a series of public limited partnerships that invested in the production and distribution of more than 130 major motion pictures. From 1982 to 1984, Mr. Radov was the Director of Finance at Rainbow Programming Enterprises, a joint venture among Cablevision Systems Corporation, Cox Broadcasting and Daniels & Associates. From 1977 to 1981, Mr. Radov was Director of Marketing at Winklevoss & Associates. Mr. Radov earned a Masters of Business Administration from The Wharton School of

## Charles S. Ryan

Dr. Charles S. Ryan became a member of our Board in April 2015. Since October 2016, Dr. Ryan has served as Chief Executive Officer of Orthobond, Inc., a company that seeks to improve the performance and safety of medical devices through the use of proprietary non-polymer technology. From March 2015 to May 2016, Dr. Ryan served as Vice President, General Counsel of Cold Spring Harbor Laboratory, or CSH Laboratory, a not-for-profit research and education institution at the forefront of molecular biology and genetics, with research programs focusing on cancer, neuroscience, plant biology, genomics and quantitative biology. From 2003 to 2014, he served as Senior Vice President and Chief Intellectual Property Counsel at Forest Laboratories, Inc., a New York Stock Exchange company that developed and marketed pharmaceutical products in a variety of therapeutic categories including central nervous system, cardiovascular, anti-infective, respiratory, gastrointestinal, and pain management medicine. Dr. Ryan has over 20 years experience in managing all aspects of intellectual property litigation, conducting due diligence investigations and prosecuting patent and trademark applications in the pharmaceutical and biotechnology industries. He also serves as a director of Applied DNA Sciences, Inc., a company that uses biotechnology as a forensic foundation in creating unique security solutions addressing the challenges of modern commerce. Dr. Ryan earned a doctorate in Oral Biology and Pathology from Stony Brook University and a law degree from Western New England University. We believe that Dr. Ryan's executive-level management and legal experience give him the qualifications and skills to serve as one of our directors.

#### Paul Jude Tonna

Paul Jude Tonna became a member of our Board and Chair of our Compensation Committee in June 2014. Mr. Tonna is a highly regarded community leader and an accomplished businessman with an extensive history of public service. From 1994 to 2005 he served as a Suffolk County, New York Legislator, and from 2000 through 2002 was its Presiding Officer. He currently serves as Executive Director and a member of the Board of Advisors for The Energeia Partnership at Molloy College, a leadership academy based in Rockville Centre, New York, dedicated to identifying and addressing the serious, complex and multi-dimensional issues challenging the Long Island region. Mr. Tonna is a former Adjunct Professor in Theology & Religious Studies at St. John's University. He served as Chairman of the Suffolk County Industrial Development Agency, and currently serves as Trustee of the Long Island State Parks & Recreation Commission and as Public Trustee of the Stationary Engineers Industry Stabilization Fund. Mr. Tonna is a board member of The Advanced Energy Research & Technology Center at Stony Brook University, The Long Island Index Advisory Board and Erase Racism's College of Advisors. He also serves as the Executive Director of the Suffolk County Village Officials Association and the United States Green Building Council-Long Island Chapter. Mr. Tonna is a founding director of Empire National Bank and Chairman and Commissioner of the South Huntington Water District. Mr. Tonna holds an undergraduate degree in Philosophy from New York University and a Master's degree in Theology from Immaculate Conception Seminary, and he conducted doctoral studies in Systemic Theology at Fordham University. We believe that Mr. Tonna's executive-level management experience and his extensive experience in the Long Island community give him the qualifications and skills to serve as one of our directors.

## Scientific Advisors

### Scientific Advisory Board

The following persons are the members of our Scientific Advisory Board:

Name	Principal Positions
Wayne Marasco, M.D., Ph.D. Chairman	Professor, Department of Cancer Immunology & AIDS, Dana-Farber Cancer Institute;
	Professor of Medicine, Harvard Medical School;
	Principal Faculty Member, Harvard Stem Cell Institute
Naiyer Imam, M.D.	Chairman and President of First Medicine Inc., an international telemedicine corporation dedicated to virtual physician services and chronic disease management.
Wayne J. Olan, M.D.	Director, Interventional and Endovascular Neurosurgery;
	Associate Professor, Neurosurgery and Radiology, George Washington University Medical Center;
	Consulting Physician, Department of Radiology, National Institutes of Health
Joy Cavagnaro, Ph.D., DABT, RAC	President and Founder, Access BIO, L.C.; Fellow, Academy of Toxicological Sciences and the Regulatory Professional Society;
	Formerly Senior Pharmacologist and Director of Quality Assurance, Food and Drug Administration's Center for Biologics Evaluation and Research
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### **Chief Medical Advisor for Spine Medicine**

Gregory E. Lutz, M.D. serves as our Chief Medical Advisor for Spine Medicine. Dr. Lutz is Professor of Clinical Rehabilitation Medicine, Weill Medical College of Cornell. He is the Physiatrist-in-Chief Emeritus for Hospital for Special Surgery, or HSS. In 1997, Dr. Lutz established the Physiatry Department at HSS when he became Physiatrist-in-Chief. Dr. Lutz recently founded the Regenerative SportsCare Institute in the Upper East Side of Manhattan. The institute is dedicated to the regenerative musculoskeletal care of athletes of all ages and levels. He is also consulting physician to the National Hockey League Players' Association.

# **Family Relationships**

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

### Term of Office

We have a classified Board of Directors. The directors will hold office until the respective annual meetings of stockholders indicated below and until their respective successors are elected and qualified or until their earlier resignation or removal.

Name	Class	Term Expires
		-01-
Mark Weinreb	III	2017
Robert B. Catell	I	2018
John M. Desmarais	II	2019
A. Jeffrey Radov	III	2017
Charles S. Ryan	I	2018
Paul Jude Tonna	II	2019

Each executive officer will hold office until the initial meeting of the Board of Directors following the next annual meeting of stockholders and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

## **Audit Committee**

The Audit Committee of the Board of Directors is responsible for overseeing our accounting and financial reporting processes and the audits of our financial statements. The members of the Audit Committee are Messrs. Radov (Chair), Ryan and Tonna.

## **Audit Committee Financial Expert**

Our Board of Directors has determined that Mr. Radov is an "audit committee financial expert," as that is defined in Item 407(d)(5) of Regulation S-K Mr. Radov is an "independent director" based on the definition of independence in Listing Rule 5605(a)(2) of The Nasdaq Stock Market.

### Section 16(a) Beneficial Ownership Reporting Compliance

Section 16 of the Exchange Act requires that reports of beneficial ownership of common stock and changes in such ownership be filed with the Securities and Exchange Commission by Section 16 "reporting persons," including directors, certain officers, holders of more than 10% of the outstanding common stock and certain trusts of which reporting persons are trustees. We are required to disclose in this Annual Report each reporting person whom we know to have failed to file any required reports under Section 16 on a timely basis during the fiscal year ended December 31, 2016. To our knowledge, based solely on a review of copies of Forms 3, 4 and 5 filed with the Securities and Exchange Commission and written representations that no other reports were required, during the fiscal year ended December 31, 2016, our officers, directors and 10% stockholders complied with all Section 16(a) filing requirements applicable to them. However, Francisco Silva, our Vice President of Research and Development, filed one Form 4 late (reporting four transactions) with regard to the fiscal years ended December 31, 2013 and 2014.

## **Code of Ethics for Senior Financial Officers**

Our Board of Directors has adopted a Code of Ethics for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A copy of the Code of Ethics is posted on our website, www.biorestorative.com. We intend to satisfy the disclosure requirement under Item 5.05(c) of Form 8-K regarding an amendment to, or a waiver from, our Code of Ethics by posting such information on our website, www.biorestorative.com.

## ITEM 11. 11. EXECUTIVE COMPENSATION.

## **Summary Compensation Table**

The following Summary Compensation Table sets forth all compensation earned in all capacities during the fiscal years ended December 31, 2016 and 2015 by our (i) principal executive officer, and (ii) our two most highly compensated executive officers, other than our principal executive officer, whose total compensation for the 2016 fiscal year, as determined by Regulation S-K, Item 402, exceeded \$100,000 (the individuals falling within categories (i) and (ii) are collectively referred to as the "Named Executive Officers"):

						Option		All	
Name and Principal						Awards		Other	
Position	Year	_	Salary	 Bonus	E	arned (1)	Con	npensation	Total
Mark Weinreb,	2016	\$	400,000	\$ 96,000(2)	\$	887,000(3)	\$	7,200(4)	\$ 1,390,200(4)
Chief Executive Officer	2015	\$	400,000	\$ 200,000(5)	\$	743,300(6)	\$	7,200(7)	\$ 1,350,500(7)
Edward Field	2016	\$	300,000	\$ $36,000_{(2)}$	\$	263,000(8)	\$	-	\$ 599,000
President of Disc/Spine Division	2015	(9) \$	252,500	\$ 7,612	\$	291,900(10)	\$	-	\$ 552,012
Francisco Silva,	2016	\$	250,000	\$ 26,000(2)	\$	197,200(11)	\$	-	\$ 473,200
VP of Research and Development	2015	\$	250,000	\$ - ' '	\$	91,500(12)	\$	-	\$ 341,500

- (1) The amounts reported in this column represent the grant date fair value of the option awards granted during the years ended December 31, 2016 and 2015, calculated in accordance with FASB ASC Topic 718. For a detailed discussion of the assumptions used in estimating fair values, see Note 10 Stockholders' Deficiency in the notes that accompany our consolidated financial statements included in this Annual Report following Item 16 hereof.
- (2) Represents the amount of bonus for 2016 earned pursuant to the achievement of certain performance goals.
- Ouring 2016, Mr. Weinreb was granted a ten year option under our 2010 Equity Participation Plan, or the Plan, for the purchase of 275,000 shares of common stock at an exercise price of \$3.73 per share. Such option is exercisable to the extent of 91,667 shares as of each of the first and second anniversaries of the date of grant and 91,666 shares as of the third anniversary of the date of grant. See "Employment Agreements" below for a discussion of certain provisions relating to the options granted to Mr. Weinreb.
- (4) Of the aggregate \$1,390,200 earned during 2016, \$887,000 represents the grant date value of non-cash stock-based compensation awards, irrespective of the vesting period of those awards. Of the \$503,200 earned cash compensation, \$7,200 and \$124,980 were paid in cash during 2016 and 2017 (prior to the date of the filing of this Annual Report), respectively, and \$403,020 remains unpaid for 2016. All Other Compensation represents an automobile allowance paid to Mr. Weinreb in 2016.
- (5) Pursuant to Mr. Weinreb's employment agreement with us, he earned a bonus for 2015 equal to 50% of his annual salary. See "Employment Agreements" below.
- (6) During 2015, Mr. Weinreb was granted a ten year option under the Plan for the purchase of 208,000 shares of common stock at an exercise price of \$7.00 per share, subject to stockholder approval of an increase in the number of shares of common stock authorized to be issued pursuant to the Plan. Stockholder approval of such increase was obtained in 2015. Such option is exercisable to the extent of 104,000 shares as of such stockholder approval, 34,667 shares as of each of the first and second anniversaries of the date of grant and 34,666 shares as of the third anniversary of the date of grant. See "Employment Agreements" below for a discussion of certain provisions relating to the options granted to Mr. Weinreb and Item 13 ("Certain Relationships and Related Transactions, and Director Independence") for a discussion of the repricing of the option.
- (7) Of the aggregate \$1,350,500 earned during 2015, \$743,300 represents the grant date value of non-cash stock-based compensation awards, irrespective of the vesting period of those awards. Of the \$607,200 earned cash compensation, \$7,200, \$543,470 and \$56,530 were paid in cash during 2015, 2016 and 2017 (prior to the date of the filing of this Annual Report), respectively, and nothing remains unpaid for 2015. All Other Compensation represents an automobile allowance paid to Mr. Weinreb in 2015.
- (8) During 2016, Mr. Field was granted a ten year option under the Plan for the purchase of 80,000 shares of common stock at an exercise price of \$3.73 per share. Such option is exercisable to the extent of 26,667 shares as of each of the first and second anniversaries of the date of grant and 26,666 shares as of the third anniversary of the date of grant.
- (9) Mr. Field was elected as President of our Disc/Spine Division in February 2015.
- Ouring 2015, Mr. Field was granted a ten year option under the Plan for the purchase of 25,000 shares of common stock at an exercise price of \$9.20 per share. Such option is exercisable to the extent of 8,334 shares as of the first anniversary of the date of grant and 8,333 shares as of each of the second and third anniversaries of the date of grant. In addition, during 2015, Mr. Field was granted a ten year option under the Plan for the purchase of 25,000 shares of common stock at an exercise price of \$7.00 per share, subject to stockholder approval of an increase in the number of shares of common stock authorized to be issued pursuant to the Plan. Stockholder approval of such increase was obtained in 2015. Such option is exercisable to the extent of 8,334 shares as of the first anniversary of the date of grant and 8,333 shares as of each of the second and third anniversaries of the date of grant. See Item 13 ("Certain Relationships and Related Transactions, and Director Independence") for a discussion of the repricing of the options.
- (11) During 2016, Mr. Silva was granted a ten year option under the Plan for the purchase of 60,000 shares of common stock at an exercise price of \$3.73 per share. Such option is exercisable to the extent of 20,000 shares as of each of the first, second and third anniversaries of the date of grant.
- During 2015, Mr. Silva was granted a ten year option under the Plan for the purchase of 25,000 shares of common stock at an exercise price of \$7.00 per share, subject to stockholder approval of an increase in the number of shares of common stock authorized to be issued pursuant to the Plan. Stockholder approval of such increase was obtained in 2015. Such option is exercisable to the extent of 8,334 shares as of the first anniversary of the date of grant and 8,333 shares as of each of the second and third anniversaries of the date of grant. See Item 13 ("Certain Relationships and Related Transactions, and Director Independence") for a discussion of the repricing of the option.

# Outstanding Equity Awards at Fiscal Year-End

The following table provides information on outstanding equity awards as of December 31, 2016 to the Named Executive Officers:

		Op	tion Awards							
Name Mark Weinreb	Number of securities underlying unexercised options exercisable 4,000	Number of securities underlying unexercised options unexercisable	Equity incentive plan awards: Number of securities underlying unexercised unearned options	Option exercise price \$ 10.00	expiration date	Number of shares or units of stock that have not vested	Mark value shares unit that h not ves	ket e of s of ts o ave	Equity incentive plan awards: Number of unearned shares, units or other rights that have not vested	Equity incentive plan awards: Market or payout value of unearned shares, units or other rights that have not vested
Mark Weinreb	50,000	-	-	\$ 21.00	2/10/2022	-	\$	-	-	\$ -
Mark Weinreb	20,000	-	-	\$ 30.00	12/7/2022	-	\$	-	-	\$ -
Mark Weinreb	12,500	-	-	\$ 12.00	10/4/2023	-	\$	-	-	\$ -
Mark Weinreb	50,000	-	-	\$ 13.00	2/18/2024	-	\$	-	-	\$ -
Mark Weinreb	100,000	50,000(1)	-	\$ 6.60	10/23/2024	-	\$	-	-	\$ -
Mark Weinreb	138,667	69,333 <sub>(2)</sub>	-	\$ 7.00	9/4/2025	-	\$	-	-	\$ -
Mark Weinreb	91,667	183,333(3)	-	\$ 3.73	6/10/2026	-	\$	-	-	\$ -
Edward L. Field	8,334	16,666(4)	-	\$ 9.20	2/9/2025	-	\$	-	-	\$ -
Edward L. Field	8,334	16,666(5)	-	\$ 7.00	9/4/2025	-	\$	-	-	\$ -
Edward L. Field	-	80,000(6)	-	\$ 3.73	6/1/2026	-	\$	-	-	\$ -
Francisco Silva	4,000	-	-	\$ 10.00	4/4/2021	-	\$	-	-	\$ -
Francisco Silva	150	-	-	\$ 25.00	6/23/2021	-	\$	-	-	\$ -
Francisco Silva	1,000	-	-	\$ 20.00	11/16/2021	-	\$	-	-	\$ -
Francisco Silva	2,000	-	-	\$ 21.00	2/10/2022	-	\$	-	-	\$ -
Francisco Silva	4,500	-	3,000(7)	\$ 28.00	5/2/2022	-	\$	-	-	\$ -
Francisco Silva	4,000	-	-	\$ 30.00	12/7/2022	-	\$	-	-	\$ -
Francisco Silva	5,000	-	-	\$ 12.00	10/4/2023	-	\$	-	-	\$ -
Francisco Silva	12,500	-	-	\$ 13.00	2/18/2024	-	\$	-	-	\$ -
Francisco Silva	2,000	-	-	\$ 10.60	3/12/2024	-	\$	-	-	\$ -
Francisco Silva	2,000	-	-	\$ 28.00	5/2/2022	-	\$	-	-	\$ -
Francisco Silva	25,000	12,500(8)	-	\$ 6.60	10/23/2024	-	\$	-	-	\$ -
Francisco Silva	8,334	16,666(5)	-	\$ 7.00	9/4/2025	-	\$	-	-	\$ -
Francisco Silva	-	60,000(9)	-	\$ 3.73	6/10/2026	-	\$	-	-	\$ -
			80							

- (1) Option is exercisable effective as of October 23, 2017.
- (2) Option is exercisable to the extent of 34,667 shares effective as of September 4, 2017 and 34,666 shares effective as of September 4, 2018.
- (3) Option is exercisable to the extent of 91,667 shares on June 10, 2017 and 91,666 shares on June 10, 2018.
- (4) Option is exercisable to the extent of 8,333 shares effective as of each of February 9, 2017 and February 9, 2018.
- (5) Option is exercisable to the extent of 8,333 shares effective as of each of September 4, 2017 and September 4, 2018.
- (6) Option is exercisable to the extent of 26,667 shares on each of June 10, 2017 and June 10, 2018, and 26,666 shares on June 10, 2019.
- (7) Options are exercisable commencing on the date (provided that such date is during Mr. Silva's employment with us), if any, on which either (i) the FDA approves a biologics license application made by us with respect to any biologic product or (ii) a 510(k) Premarket Notification submission is made by us to the FDA with respect to a certain device.
- (8) Option is exercisable effective as of October 23, 2017.
- (9) The option is exercisable to the extent of 20,000 shares on each of June 10, 2017, June 10, 2018 and June 10, 2019.

## **Employment Agreements**

In March 2015, we entered into an employment agreement with Mark Weinreb, our Chief Executive Officer. Pursuant to the employment agreement, which expires on December 31, 2017, Mr. Weinreb is entitled to receive a salary of \$400,000 per annum. Mr. Weinreb was entitled to receive an annual bonus for 2015 equal to 50% of his annual base salary and is entitled to receive an annual bonus for 2016 and 2017 of up to 40% and 50% of his annual base salary, respectively, in the event certain performance goals, as determined by our Compensation Committee, are satisfied. Pursuant to the employment agreement, in the event that Mr. Weinreb's employment is terminated by us without "cause", or Mr. Weinreb terminates his employment for "good reason" (each as defined in the employment agreement), Mr. Weinreb would be entitled to receive severance in an amount equal to one time his then annual base salary and certain benefits, plus \$100,000 (in lieu of bonus). In addition, pursuant to the employment agreement, Mr. Weinreb would be entitled to receive such severance in the event that the term of his employment agreement is not extended beyond December 31, 2017 and, within three months of such expiration date, his employment is terminated by us without "cause" or Mr. Weinreb terminates his employment for any reason. Further, in the event that Mr. Weinreb's employment agreement), Mr. Weinreb would be entitled to receive severance in an amount equal to one and one-half times his then annual base salary and certain benefits, plus \$300,000 (in lieu of bonus). Pursuant to the employment agreement, with respect to options granted to Mr. Weinreb during the term of his employment as set forth above. In addition, pursuant to the employment agreement, to the extent that an option granted to Mr. Weinreb during his term of his employment with us becomes exercisable (whether due to the passage of time or otherwise), such option shall remain exercisable until its expiration date notwithstanding any termination of employment with us.

Effective February 9, 2015, we entered into an at will employment agreement with Edward L. Field, President of our Disc/Spine Division. Pursuant to the employment agreement, Mr. Field is currently entitled to receive a salary of \$300,000 per annum. In addition, pursuant to the employment agreement, Mr. Field is entitled to receive an annual bonus of up to 30% of his annual salary (up to 24% of his annual salary for 2016) based on the satisfaction of certain performance goals. Further, pursuant to the employment agreement, in the event that Mr. Field's employment with us is terminated without cause, Mr. Field would be entitled to receive severance in an amount equal to 50% of his then annual base salary.

Effective April 5, 2011, we entered into an at will employment agreement with Francisco Silva, our Vice President of Research and Development. Pursuant to the employment agreement, as amended in March 2015, Mr. Silva is currently entitled to receive a salary of \$250,000 per annum. In addition, pursuant to the employment agreement, as amended, Mr. Silva is entitled to receive an annual bonus of up to 20% of his annual salary (up to 16% of his annual salary for 2016) based on the satisfaction of certain performance goals. Further, pursuant to the employment agreement, as amended, in the event that Mr. Silva's employment with us is terminated without cause, Mr. Silva would be entitled to receive severance in an amount equal to 50% of his then annual base salary.

## DIRECTOR COMPENSATION

The following table sets forth certain information concerning the compensation of our non-employee directors for the fiscal year ended December 31, 2016:

Name	es Earned r Paid in Cash	tock vards	Option wards <sup>(1)</sup>	Incen	-Equity tive Plan pensation	Do Com	qualified eferred pensation ernings	Other pensation	Total
Robert B. Catell (2)	\$ 35,000	\$ -	\$ 146,400(3)	\$	-	\$	-	\$ -	\$ 181,400
John M. Desmarais	\$ 40,000	\$ -	\$ 112,900(4)	\$	-	\$	-	\$ -	\$ 152,900
A. Jeffrey Radov	\$ 40,000	\$ -	\$ 412,900(5)	\$	-	\$	-	\$ -	\$ 452,900
Charles S. Ryan	\$ 40,000	\$ -	\$ 148,400(6)	\$	-	\$	-	\$ -	\$ 188,400
Paul Jude Tonna	\$ 40,000	\$ -	\$ 206,400(7)	\$	-	\$	-	\$ -	\$ 246,400
			82						

- (1) The amounts reported in this column represent the grant date fair value of the option awards granted during the year ended December 31, 2016, calculated in accordance with FASB ASC Topic 718. For a detailed discussion of the assumptions used in estimating fair values, see Note 10 Stockholders' Deficiency in the notes that accompany our consolidated financial statements in this Annual Report following Item 16 hereof.
- (2) Mr. Catell was elected as a director in February 2016.
- (3) As of December 31, 2016. Mr. Catell held options for the purchase of 44,000 shares of common stock.
- (4) As of December 31, 2016, Mr. Desmarais held options for the purchase of 50,000 shares of common stock.
- (5) As of December 31, 2016, Mr. Radov held options for the purchase of 366,000 shares of common stock.
- (6) As of December 31, 2016, Mr. Ryan held options for the purchase of 81,000 shares of common stock.
- (7) As of December 31, 2016, Mr. Tonna held options for the purchase of 164,000 shares of common stock.

Each of Messrs. Catell, Desmarais, Radov, Ryan and Tonna, our non-employee directors, is entitled to receive, as compensation for his services as a director, \$30,000 per annum plus \$10,000 per annum for all committee service, in each case payable quarterly (subject to our cash needs).

# ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

### **Principal Stockholders**

The following table sets forth certain information regarding the beneficial ownership of our common stock, as of March 15, 2017, known by us, through transfer agent records, to be held by: (i) each person who beneficially owns 5% or more of the shares of common stock then outstanding; (ii) each of our directors; (iii) each of our Named Executive Officers (as defined above); and (iv) all of our directors and executive officers as a group.

The information in this table reflects "beneficial ownership" as defined in Rule 13d-3 of the Exchange Act. To our knowledge, and unless otherwise indicated, each shareholder has sole voting power and investment power over the shares listed as beneficially owned by such shareholder, subject to community property laws where applicable. Percentage ownership is based on 5,276,027 shares of common stock outstanding as of March 15, 2017.

	Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Approximate Percent of Class
John M. Desmarais 230 Park Avenue			
New York, New York		1,887,907(1)	28.3%
Westbury (Bermuda) Ltd. Westbury Trust Victoria Hall 11 Victoria Street Hamilton, HMEX Bermuda		1,191,662(2)	21.6%
namilion, niviex beimuda		1,191,002(2)	21.0%
Mark Weinreb 40 Marcus Drive Melville, New York		546,834(3)	9.5%
Robert Austin Sperling Jr. 22 East Lake Drive Annapolis, MD 21403		422,720(4)	7.8%
A. Jeffrey Radov 8 Walworth Avenue Scarsdale, New York		238,001(5)	4.3%
Robert B. Catell 62 Osborne Road Garden City, New York		174,399(6)	_3.2%
Paul Jude Tonna 69 Chichester Road Huntington, New York		160,501(7)	3.0%
Charles S. Ryan 1302 Ridge Road Laurel Hollow, New York		117,002(8)	2.2%
Francisco Silva 40 Marcus Drive Melville, New York		72,729(9)	1.4%
Edward L. Field 40 Marcus Drive Melville, New York		25,001(10)	*
All directors and executive office	ers as a group (9 persons)	3,256,091(11)	41.7%
	/	84	_

# \* Less than 1%

- (1) Based upon Schedule 13D filed with the Securities and Exchange Commission (the "SEC") and other information known to us. Includes 1,394,509 shares of common stock issuable upon the exercise of currently exercisable options and warrants (including warrants for the purchase of 40,000 shares of common stock held by a trust for which Mr. Desmarais and his wife serve as the trustees and which was established for the benefit of his immediate family).
- (2) Based upon Schedule 13D filed with the SEC and other information known to us. Includes 239,182 shares of common stock issuable upon the exercise of currently exercisable warrants. The shares and warrants are owned directly by Westbury (Bermuda) Ltd. which is 100% owned by Westbury Trust.
- (3) Includes 466,834 shares of common stock issuable upon the exercise of options that are exercisable currently or within 60 days.
- (4) Includes 151,360 shares of common stock issuable upon the exercise of currently exercisable warrants.
- (5) Includes 225,501 shares of common stock issuable upon the exercise of options that are exercisable currently or within 60 days.
- (6) Includes 98,533 shares of common stock issuable upon the exercise of currently exercisable options and warrants.
- (7) Represents (i) 6,000 shares of common stock held jointly with Mr. Tonna's wife and (ii) 124,501 shares of common stock issuable upon the exercise of options and warrants that are exercisable currently or within 60 days.
- (8) Includes 74,085 shares of common stock issuable upon the exercise of options and warrants that are exercisable currently or within 60 days.
- (9) Includes (i) 170 shares of common stock held in an individual retirement account for the benefit of Mr. Silva and (ii) 68,484 shares of common stock issuable upon the exercise of options that are exercisable currently or within 60 days.
- (10) Represents shares of common stock issuable upon the exercise of options that are exercisable currently or within 60 days.
- (11) Includes 2,511,165 shares of common stock issuable upon the exercise of options and warrants that are exercisable currently or within 60 days.

### Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth information as of December 31, 2016 with respect to compensation plans (including individual compensation arrangements) under which our common stock are authorized for issuance, aggregated as follows:

- · All compensation plans previously approved by security holders; and
- All compensation plans not previously approved by security holders.

#### **EQUITY COMPENSATION PLAN INFORMATION**

	Number of securities to be issued upon exercise of outstanding options (a)	Weighted-average exercise price of outstanding options (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by			
security holders	2,168,950	\$ 7.53	2,036,050
Total	2,168,950	\$ 7.53	2,036,050

# ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

### Westbury

In March 2013, Stem Cell Cayman, Ltd., or Cayman, one of our wholly-owned subsidiaries, borrowed \$450,000 from Westbury (Bermuda) Ltd., or Westbury, one of our principal stockholders. The loan amount was combined with the already outstanding \$3,550,000 of previous borrowings from Westbury into a new \$4,000,000 zero coupon note, or the \$4,000,000 Westbury Note, which was scheduled to mature on July 31, 2014. In consideration of the \$450,000 loan, the settlement of accrued and unpaid interest of \$213,000, and for extending the maturity date of the note to July 31, 2014, we issued to Westbury 30,000 shares of common stock and a five year warrant to purchase 20,000 shares of common stock at an exercise price of \$50.00 per share. In August 2014, in consideration of an extension of the maturity date of the \$4,000,000 Westbury Note to December 31, 2014, we issued to Westbury 27,500 shares of common stock. In December 2014, in consideration of a further extension of the maturity date of the \$4,000,000 Westbury Note to June 30, 2015, we issued to Westbury 22,500 shares of common stock.

In May 2014, Cayman borrowed an additional \$500,000 from Westbury. The promissory note evidencing the loan, as amended, or the \$500,000 Westbury Note, provided for the payment of the principal amount, together with interest at the rate of 15% per annum, on June 30, 2015. The \$500,000 Westbury Note also provided for the mandatory prepayment of the principal amount to the extent of any monies received by us pursuant to the Research and Development Agreement, dated as of March 19, 2014, between Rohto Pharmaceutical Co., Ltd. and us and/or the Research Agreement, dated as of March 24, 2014, between Pfizer Inc. and us. Pursuant to such provision, \$89,063 in principal was prepaid. Westbury agreed to waive the early payment of the \$500,000 Westbury Note with regard to approximately \$316,000 additionally received by us pursuant to the agreements with Rohto and Pfizer. Interest on the entire principal amount of the \$500,000 Westbury Note was payable until such time as the principal amount was paid in full.

In December 2013, pursuant to a warrant repricing program implemented by us with respect to all outstanding and exercisable warrants, Westbury exercised warrants for the purchase of 40,000 shares of our common stock at an exercise price of \$6.00 per share. In connection with the warrant exercise, we granted to Westbury a new warrant, or the 2013 Westbury Warrant, for the purchase of 40,000 shares of our common stock at an exercise price of \$15.00 per share. The 2013 Westbury Warrant was initially exercisable until December 31, 2015 and can be redeemed by us under certain circumstances.

In February 2015, we sold 50,000 shares of common stock to Westbury at an aggregate purchase price of \$300,000. In consideration of the purchase, we issued to Westbury a five year warrant for the purchase of 12,500 shares of common stock at an exercise price of \$15.00 per share.

In May 2015, we entered into an exchange agreement with Westbury pursuant to which Westbury converted the outstanding indebtedness owed to it under the \$4,000,000 Westbury Note and the \$500,000 Westbury Note in the aggregate principal amount of \$4,410,937, together with accrued interest in the amount of \$69,436, into 746,729 shares of our common stock and a five year warrant for the purchase of 186,682 shares of common stock at an exercise price of \$15.00 per share. In consideration of the note exchange, we agreed to extend the expiration date of the 2013 Westbury Warrant to December 31, 2017.

In October 2015, we borrowed \$150,000 from an affiliate of Westbury. The promissory note evidencing the loan, or the \$150,000 Westbury Note, provided for the payment of the principal amount, together with interest at the rate of 10% per annum, on December 9, 2015. The \$150,000 Westbury Note provided for the mandatory prepayment of the principal amount, together with accrued interest, to the extent that we receive proceeds from a public equity offering or monies in payment of an accounts receivable. The payment of the \$150,000 Westbury Note was secured by the grant to the lender of a security interest in the patent we received in September 2015 related to our *ThermoStem Program*. In December 2015, in consideration of an extension of the maturity date of the \$150,000 Note to March 9, 2016, we agreed to reduce the exercise price of warrants held by Westbury for the purchase of 239,182 shares of common stock from \$15.00 to \$4.00 per share. In July 2016, the \$150,000 Westbury Note was paid in full.

#### John M. Desmarais

In March 2016, John M. Desmarais, one of our non-employee directors and principal stockholders, purchased 250,000 shares of our common stock at a price of \$4.00 per share (gross proceeds of \$1,000,000) and, in consideration thereof, received the following warrants: (i) a five year warrant to purchase 250,000 shares of our common stock at an exercise price of \$5.00 per share; (ii) an eight month warrant to purchase 444,444 shares of our common stock at an exercise price of \$4.50 per share; and (iii) a one year warrant to purchase 400,000 shares of our common stock at an exercise price of \$5.00 per share.

In June 2016, we borrowed \$500,000 from a trust for which Mr. Desmarais and his wife serve as the trustees and which was established for the benefit of Mr. Desmarais's immediate family. The promissory note evidencing the loan, or the Desmarais Trust Note, provides for the payment of the principal amount, together with interest at the rate of 10% per annum, on July 1, 2017. In the event that, prior to the maturity date of the Desmarais Trust Note, we receive net proceeds of \$10,000,000 from a single equity or debt financing (as opposed to a series of related or unrelated financings), the trust has the right to require that we prepay the amount due under the Desmarais Trust Note (subject to the consent of the party that provided the particular financing). In consideration of the loan, we issued to the trust a five year warrant for the purchase of 40,000 shares of our common stock at an exercise price of \$4.00 per share.

In September 2016, Mr. Desmarais purchased 80,000 shares of our common stock at a purchase price of \$3.00 per share (gross proceeds of \$240,000). In consideration of the purchase, we issued to Mr. Desmarais a five year warrant to purchase 80,000 shares of our common stock at an exercise price of \$4.00 per share and extended the expiration dates of the warrants held by Mr. Desmarais for the purchase of 444,444 and 400,000 shares of our common stock for a period of one year to November 18, 2017 and March 18, 2018, respectively.

In December 2016, we borrowed \$60,000 from Mr. Desmarais. The promissory note evidencing the loan provided for the payment of \$65,000 on January 31, 2017. In consideration of the loan, we further extended the expiration dates of the warrants held by Mr. Desmarais for the purchase of 444,444 and 400,000 shares of our common stock to December 31, 2018. In February 2017, we entered into an exchange agreement with Mr. Desmarais pursuant to which Mr. Desmarais exchanged the principal amount of the promissory note, together with accrued interest, for 21,731 shares of our common stock at an exchange price of \$3.00 per share and, in consideration thereof, received a five year warrant to purchase 21,731 shares of our common stock at an exercise price of \$4.00 per share.

## Others

In May 2015, Charles S. Ryan, one of our non-employee directors, purchased 10,000 shares of our common stock at a price of \$5.00 per share (gross proceeds of \$50,000) and, in consideration thereof, received a five year warrant to purchase 10,000 shares of our common stock at an exercise price of \$15.00 per share.

In November 2015, Mr. Ryan exchanged a promissory note in the principal amount of \$25,000 for 6,250 shares of our common stock at an exchange price of \$4.00 per share and, in consideration thereof, received a five year warrant to purchase 6,250 shares of our common stock at an exercise price of \$4.00 per share.

Between June 2015 and September 2015, each of Stanley Weinreb, the father of Mark Weinreb, our Chief Executive Officer, and his wife, Constance Weinreb, loaned us \$65,000. In consideration of the loans, we issued a promissory note to each of them in the principal amount of \$75,000, payable on October 30, 2015, referred to as the Weinreb Notes. We have repaid \$20,000 and \$10,000 of the principal amounts payable to Constance Weinreb and Stanley Weinreb, respectively. Constance Weinreb and Stanley Weinreb had agreed to extend the maturity date of their notes to August 31, 2016 and September 30, 2016, respectively. No interest is payable pursuant to the Weinreb Notes.

Between March 2016 and May 2016, Robert B. Catell, one of our non-employee directors, purchased an aggregate of 50,000 shares of our common stock at a price of \$4.00 per share (aggregate gross proceeds of \$200,000) and, in consideration thereof, received five year warrants to purchase an aggregate of 50,000 shares of our common stock at an exercise price of \$5.00 per share.

In August 2016, we borrowed \$100,000 from Mr. Catell. The promissory note evidencing the loan, or the Catell Note, provides for the payment of the principal amount, together with interest at the rate of 10% per annum, on February 5, 2017. In the event that, prior to the maturity date of the Catell Note, we receive net proceeds of \$10,000,000 from a single equity or debt financing (as opposed to a series of related or unrelated financings), Mr. Catell has the right to require that we prepay the amount due under the Catell Note (subject to the consent of the party that provided the particular financing). In consideration of the loan, we issued to Mr. Catell a five year warrant for the purchase of 8,000 shares of our common stock at an exercise price of \$4.00 per share.

In December 2016, we borrowed \$30,000 from Mr. Catell. The promissory note evidencing the loan provided for the payment of \$32,500 on January 31, 2017. In February 2017, we entered into an exchange agreement with Mr. Catell pursuant to which Mr. Catell exchanged the principal amount of the promissory note, together with accrued interest, for 10,866 shares of our common stock at an exchange price of \$3.00 per share and, in consideration thereof, received a five year warrant to purchase 10,866 shares of our common stock at an exercise price of \$4.00 per share.

In February 2017, the Compensation Committee of our Board of Directors reduced the exercise price of outstanding options for the purchase of an aggregate of 1,208,950 shares of our common stock (with exercise prices ranging between \$5.70 and \$30.00 per share) to \$4.70 per share, which was the closing price for our common stock on the day prior to the determination, as reported by the OTCQB. The exercise price reduction related to options held by, among others, our named executive officers and directors with respect to the following number of shares: (i) Mark Weinreb, our President, Chief Executive Officer and Chairman of the Board: 494,500 shares, (ii) A. Jeffrey Radov, one of our directors: 238,000 shares, (iii) Paul Jude Tonna, one of our directors: 100,000 shares, (iv) Dr. Charles S. Ryan, one of our directors: 35,000 shares, (v) Francisco Silva, our Vice President of Research and Development: 100,650 shares, and (vi) Edward L. Field, President of our Disc/Spine Division: 50,000 shares.

In March 2017, we entered into exchange agreements with Messrs. Catell, Desmarais, Ryan and Tonna, each a non-employee director, pursuant to which accrued director fees were exchanged for our common stock at an exchange price of \$3.00 per share and, in consideration thereof, we issued to them five year warrants for the purchase of our common stock at an exercise price of \$4.00 per share as follows: (i) Mr. Catell: \$45,000 for 15,000 shares and 15,000 warrants; (ii) Mr. Desmarais: \$50,000 for 16,667 shares and 16,667 warrants; (iii) Mr. Ryan: \$80,000 for 26,667 shares and 26,667 warrants; and (iv) Mr. Tonna: \$90,000 for 30,000 shares and 30,000 warrants.

### **Director Independence**

## **Board of Directors**

Our Board of Directors is currently comprised of Mark Weinreb (Chair), Robert B. Catell, John M. Desmarais, A. Jeffrey Radov, Charles S. Ryan and Paul Jude Tonna. Each of Messrs. Catell, Desmarais, Radov, Ryan and Tonna is currently an "independent director" based on the definition of independence in Listing Rule 5605(a)(2) of The Nasdaq Stock Market.

#### **Audit Committee**

The members of our Board's Audit Committee currently are Messrs. Radov (Chair), Ryan and Tonna, each of whom is an "independent director" based on the definition of independence in Listing Rule 5605(a)(2) The Nasdaq Stock Market and Rule 10A-3(b)(1) under the Exchange Act.

### **Nominating Committee**

The members of our Board's Nominating Committee currently are Messrs. Tonna (Chair), Radov and Ryan, each of whom is an "independent director" based on the definition of independence in Listing Rule 5605(a)(2) of The Nasdaq Stock Market.

## **Compensation Committee**

The members of our Board's Compensation Committee currently are Messrs. Tonna (Chair), Catell and Radov, each of whom is an "independent director" based on the definition of independence in Listing Rule 5605(a)(2) of The Nasdaq Stock Market.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Marcum LLP has served as our independent registered public accountants for the years ended December 31, 2016 and 2015.

The following is a summary of the fees billed or expected to be billed to us by Marcum LLP, our independent registered public accountants, for professional services rendered with respect to the fiscal years ended December 31, 2016 and 2015:

	2016		2015
Audit fees	\$ 118,0	00 \$	209,001
Audit related fees		-	-
Tax fees	9,0	00	9,000
All other fees		_	=
	\$ 127,0	00 \$	218,001

- (1) Audit Fees consist of fees billed and expected to be billed for services rendered for the audit of our consolidated financial statements for the fiscal years ended December 31, 2016 and 2015 and in connection with the filing of Forms S-1 and S-8 registration statements.
- (2) Audit-Related Fees consist of fees billed for assurance and related services that are reasonably related to the performance of the audit of our financial statements and are not reported under "Audit Fees."
- (3) Tax Fees consist of fees billed for professional services related to preparation of our U.S. federal and state income tax returns and tax advice.
- (4) All Other Fees consist of fees billed for products and services provided by our independent registered public accountants, other than those disclosed above.

The Audit Committee is responsible for the appointment, compensation and oversight of the work of the independent registered public accountants, and approves in advance any services to be performed by the independent registered public accountants, whether audit-related or not. The Audit Committee reviews each proposed engagement to determine whether the provision of services is compatible with maintaining the independence of the independent registered public accountants. The fees shown above were pre-approved either by our Board or our Audit Committee.

### PART IV

Certificate of Incorporation, incorporated by reference to the registrant's Current Report on Form 8-K for an event dated December 19, 2014, wherein such

# ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

# Exhibit No.

3.1

document is identified as Exhibit 3.3 3.2 Certificate of Amendment of Certificate of Incorporation filed with the State of Delaware on July 2, 2015, incorporated by reference to the registrant's Current Report on Form 8-K for an event dated July 6, 2015, wherein such document is identified as Exhibit 3.1 3.3 Bylaws, incorporated by reference to the registrant's Current Report on Form 8-K for an event dated December 19, 2014, wherein such document is identified as Exhibit 3.4 10.1 2010 Equity Participation Plan, as amended\* 10.2 Executive Employment Agreement, dated as of March 9, 2015, between BioRestorative Therapies, Inc. and Mark Weinreb ("Weinreb Employment Agreement"), incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.2 10.3 Amendment to Weinreb Employment Agreement, dated February 14, 2017, incorporated by reference to the registrant's Current Report on Form 8-K for an event dated February 8, 2017, wherein such document is identified as Exhibit 10.1. Stock Option Agreement, dated December 15, 2010, between Stem Cell Assurance, Inc. and Mark Weinreb, incorporated by reference to the registrant's Form 10, 10.4 wherein such document is identified as Exhibit 10.17 10.5 Amended and Restated Executive Employment Agreement, dated May 10, 2011, between Stem Cell Assurance, Inc. and Francisco Silva ("Silva Employment Agreement"), incorporated by reference to the registrant's Form 10, wherein such document is identified as Exhibit 10.23 10.6 Amendment to Silva Employment Agreement, dated November 4, 2011, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 10.27 10.7 Amendment to Silva Employment Agreement, dated May 3, 2012, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2012, wherein such document is identified as Exhibit 10.29 10.8 Amendment to Silva Employment Agreement, dated December 7, 2012, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2012, wherein such document is identified as Exhibit 10.30 10.9 Amendment to Silva Employment Agreement, dated March 9, 2015, incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.20 Amendment to Silva Employment Agreement, dated March 1, 2017\* 10.10 10.11 Stock Option Agreement, dated April 5, 2011, between Stem Cell Assurance, Inc. and Francisco Silva, incorporated by reference to the registrant's Form 10, wherein such document is identified as Exhibit 10.24 10.12 License Agreement, dated as of January 27, 2012, between Regenerative Sciences, LLC and BioRestorative Therapies, Inc. ("License Agreement"), incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 10.44

10.13	Amendment to License Agreement, dated March 21, 2012, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 10.45
10.14	Amendment to License Agreement, dated November 30, 2015, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2015, wherein such document is identified as Exhibit 10.20
10.15	Stock Option Agreement, dated as of February 10, 2012, between BioRestorative Therapies, Inc. and Mark Weinreb, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 10.46
10.16	Stock Option Agreement, dated as of February 10, 2012, between BioRestorative Therapies, Inc. and A. Jeffrey Radov, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 10.47
10.17	Stock Option Agreement, dated as of February 10, 2012, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 10.49
10.18	Consulting Agreement, dated as of August 16, 2012, between Wayne A. Marasco, M.D., Ph.D. and BioRestorative Therapies, Inc., incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2012, wherein such document is identified as Exhibit 10.56
10.19	Stock Option Agreement, dated as of December 7, 2012, between BioRestorative Therapies, Inc. and Mark Weinreb, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2012, wherein such document is identified as Exhibit 10.58
10.20	Stock Option Agreement, dated as of December 7, 2012, between BioRestorative Therapies, Inc. and A. Jeffrey Radov, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2012, wherein such document is identified as Exhibit 10.59
10.21	Stock Option Agreement, dated as of December 7, 2012, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2012, wherein such document is identified as Exhibit 10.61
10.22	Stock Option Agreement, dated as of October 4, 2013, between BioRestorative Therapies, Inc. and Mark Weinreb, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.59
10.23	Stock Option Agreement, dated as of October 4, 2013, between BioRestorative Therapies, Inc. and A. Jeffrey Radov, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.60
10.24	Stock Option Agreement, dated as of October 4, 2013, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.62
10.25	Stock Option Agreement, dated as of February 18, 2014, between BioRestorative Therapies, Inc. and Mark Weinreb, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.64

10.26 Stock Option Agreement, dated as of February 18, 2014, between BioRestorative Therapies, Inc. and A. Jeffrey Radov, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.65 10.27 Stock Option Agreement, dated as of February 18, 2014, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.67 10.28 Consulting Agreement, dated as of February 20, 2014, between Gregory E. Lutz, M.D. and BioRestorative Therapies, Inc., incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.69 10.29 Stock Option Agreement, dated as of March 12, 2014, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2013, wherein such document is identified as Exhibit 10.70 10.30 Stock Option Agreement, dated as of June 27, 2014, between BioRestorative Therapies, Inc. and Paul Jude Tonna, incorporated by reference to the registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2014, wherein such document is identified as Exhibit 10.2 10.31 Lease, dated as of August 25, 2014, between BioRestorative Therapies, Inc. and 50 Republic Road, LLC, incorporated by reference to the registrant's Current Report on Form 8-K for an event dated August 25, 2014, wherein such document is identified as Exhibit 99.1 10.32 Stock Option Agreement, dated as of October 23, 2014, between BioRestorative Therapies, Inc. and Mark Weinreb, incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.65 10.33 Stock Option Agreement, dated as of October 23, 2014, between BioRestorative Therapies, Inc. and A. Jeffrey Radov, incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.66 10.34 Stock Option Agreement, dated as of October 23, 2014, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.67 10.35 Stock Option Agreement, dated as of October 23, 2014, between BioRestorative Therapies, Inc. and Paul Jude Tonna, incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.70 10.36 Executive Employment Agreement, dated as of February 9, 2015, between BioRestorative Therapies, Inc. and Edward L. Field ("Field Employment Agreement"), incorporated by reference to the registrant's Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.72 10.37 Amendment to Field Employment Agreement, dated March 1, 2017\* 10.38 Stock Option Agreement, dated as of February 9, 2015, between BioRestorative Therapies, Inc. and Edward L. Field, incorporated by reference to the registrant's

Annual Report for the year ended December 31, 2014, wherein such document is identified as Exhibit 10.73

10.39 Stock Option Agreement, dated as of April 6, 2015, between BioRestorative Therapies, Inc. and Charles S. Ryan, J.D., Ph.D., incorporated by reference to the registrant's Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.74 10.40 Exchange Agreement, dated as of May 27, 2015, between BioRestorative Therapies, Inc. and Westbury (Bermuda) Ltd., incorporated by reference to the registrant's Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.75 10.41 Stock Option Agreement, dated as of September 4, 2015, between BioRestorative Therapies, Inc. and Mark Weinreb, incorporated by reference to the registrant's Amendment No. 1 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.77 10.42 Stock Option Agreement, dated as of September 4, 2015, between BioRestorative Therapies, Inc. and A. Jeffrey Radov, incorporated by reference to the registrant's Amendment No. 1 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.78 10.43 Stock Option Agreement, dated as of September 4, 2015, between BioRestorative Therapies, Inc. and Edward L. Field, incorporated by reference to the registrant's Amendment No. 1 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.79 Stock Option Agreement, dated as of September 4, 2015, between BioRestorative Therapies, Inc. and Francisco Silva, incorporated by reference to the registrant's 10.44 Amendment No. 1 to Form S-1 Registration (Registration No. 333-204672), wherein such document is identified as Exhibit 10.80 10.45 Stock Option Agreement, dated as of September 4, 2015, between BioRestorative Therapies, Inc. and Paul Jude Tonna, incorporated by reference to the registrant's Amendment No. 1 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.82 10.46 Stock Option Agreement, dated as of September 4, 2015, between BioRestorative Therapies, Inc. and Charles S. Ryan, J.D., Ph.D., incorporated by reference to the registrant's Amendment No. 1 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.83 10.47 Promissory Note, dated October 9, 2015, issued by BioRestorative Therapies, Inc. to Westbury FCR, Inc. in the principal amount of \$150,000, incorporated by reference to the registrant's Amendment No. 2 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.84 10.48 Security Agreement, dated as of October 9, 2015, between Westbury FCR, Inc. and BioRestorative Therapies, Inc., incorporated by reference to the registrant's Amendment No. 2 to Form S-1 Registration Statement (Registration No. 333-204672), wherein such document is identified as Exhibit 10.85 Letter agreement, dated December 7, 2015, between BioRestorative Therapies, Inc. and Westbury FCR, Inc, incorporated by reference to the registrant's Annual 10.49 Report for the year ended December 31, 2015, wherein such document is identified as Exhibit 10.61 10.50 Subscription Agreement, dated as of November 17, 2015, between BioRestorative Therapies, Inc. and John M. Desmarais, incorporated by reference to Mr. Desmarais' Schedule 13D, wherein such document is identified as Exhibit 7.1

incorporated by reference to Mr. Desmarais' Schedule 13D, wherein such document is identified as Exhibit 7.2

Warrant, dated November 17, 2015, issued by BioRestorative Therapies, Inc. to John M. Desmarais for the purchase of 125,000 shares of common stock,

10.51

10.52	Stock Option Agreement, dated as of December 1, 2015, between BioRestorative Therapies, Inc. and John M. Desmarais, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2015, wherein such document is identified as Exhibit 10.64
10.53	Stock Option Agreement, dated as of February 19, 2016, between BioRestorative Therapies, Inc. and Robert B. Catell, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2015, wherein such document is identified as Exhibit 10.65
10.54	Warrant, dated February 29, 2016, issued by BioRestorative Therapies, Inc. to Robert B. Catell for the purchase of 37,500 shares of common stock incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2015, wherein such document is identified as Exhibit 10.66
10.55	Warrant, dated March 18, 2016, issued by BioRestorative Therapies, Inc. to John M. Desmarais for the purchase of 250,000 shares of common stock, incorporated by reference to Amendment No. 1 to Mr. Desmarais' Schedule 13D, wherein such document is identified as Exhibit 7.2
10.56	Warrant, dated March 18, 2016, issued by BioRestorative Therapies, Inc. to John M. Desmarais for the purchase of 444,444 shares of common stock, incorporated by reference to Amendment No. 1 to Mr. Desmarais' Schedule 13D, wherein such document is identified as Exhibit 7.3
10.57	Warrant, dated March 18, 2016, issued by BioRestorative Therapies, Inc. to John M. Desmarais for the purchase of 400,000 shares of common stock, incorporated by reference to Amendment No. 1 to Mr. Desmarais' Schedule 13D, wherein such document is identified as Exhibit 7.4
10.58	Form of Stock Option Agreement, dated as of June 10, 2016, between BioRestorative Therapies, Inc. and each of Robert B. Catell, John M. Desmarais, A. Jeffrey Radov, Charles S. Ryan and Paul Jude Tonna*
10.59	Form of Stock Option Agreement, dated as of June 10, 2016, between BioRestorative Therapies, Inc. and each of Edward L. Field and Francisco Silva*
10.60	Stock Option Agreement, dated as of June 10, 2016, between BioRestorative Therapies, Inc. and Mark Weinreb*
10.61	Promissory Note, dated June 30, 2016, issued by BioRestorative Therapies, Inc. to Tuxis Trust in the principal amount of \$500,000*

10.62	Warrant, dated June 30, 2016, issued by BioRestorative Therapies, Inc. to Tuxis Trust for the purchase of 40,000 shares of common stock*
10.63	Promissory Note, dated August 5, 2016, issued by BioRestorative Therapies, Inc. to Robert B. Catell in the principal amount of \$100,000*
10.64	Warrant, dated August 5, 2016, issued by BioRestorative Therapies, Inc. to Robert B. Catell for the purchase of 8,000 shares of common stock*
10.65	Warrant, dated September 26, 2016, issued by BioRestorative Therapies, Inc. to John M. Desmarais for the purchase of 80,000 shares of common stock*
10.66	Letter agreement, dated September 26, 2016, between BioRestorative Therapies, Inc. and John M. Desmarais*
10.67	Promissory Note, dated December 14, 2016, issued by BioRestorative Therapies, Inc. to John M. Desmarais in the principal amount of \$65,000*
10.68	Letter agreement, dated December 14, 2016, between BioRestorative Therapies, Inc. and John M. Desmarais*
10.69	Promissory Note, dated January 3, 2017, issued by BioRestorative Therapies, Inc. to St. George Investments LLC in the principal amount of \$242,000*
10.70	Form of Warrant, dated March 1, 2017, issued by BioRestorative Therapies, Inc. to each of Robert B. Catell, John M. Desmarais, Charles S. Ryan and Paul Jude Tonna*
14	Code of Ethics, incorporated by reference to the registrant's Annual Report on Form 10-K for the year ended December 31, 2011, wherein such document is identified as Exhibit 14
21	Subsidiaries*
23	Independent Registered Public Accounting Firm's Consent*
31.1	Principal Executive Officer Certification*
31.2	Principal Financial Officer Certification*
32	Section 1350 Certification**
101.INS 101.SCH 101.CAL 101.DEF 101.LAB 101.PRE	XBRL Instance Document * XBRL Schema Document * XBRL Calculation Linkbase Document* XBRL Definition Linkbase Document* XBRL Label Linkbase Document* XBRL Presentation Linkbase Document*
* Filed here	ewith

# ITEM 16. FORM 10-K SUMMARY.

Not applicable.

<sup>\*\*</sup> Furnished herewith

# **SIGNATURES**

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

# BIORESTORATIVE THERAPIES, INC.

Dated: March 21, 2017

By: /s/ Mark Weinreb

Mark Weinreb Chief Executive Officer

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

Signature	Capacity	Date		
/s/ Mark Weinreb Mark Weinreb	Chief Executive Officer, President, Chairman of the Board and Director (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	March 21, 2017		
/s/ Robert B. Catell Robert B. Catell	Director	March 21, 2017		
/s/ John M. Desmarais John M. Desmarais	Director	March 21, 2017		
/s/ A. Jeffrey Radov A. Jeffrey Radov	Director	March 21, 2017		
/s/ Charles S. Ryan Charles S. Ryan	Director	March 21, 2017		
/s/ Paul Jude Tonna Paul Jude Tonna	Director	March 21, 2017		
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# CONSOLIDATED FINANCIAL STATEMENTS

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### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Audit Committee of the Board of Directors and Stockholders of BioRestorative Therapies, Inc.

We have audited the accompanying consolidated balance sheets of BioRestorative Therapies, Inc. (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations, changes in stockholders' deficiency, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, 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. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of BioRestorative Therapies, Inc. as of December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As more fully discussed in Note 2, the Company has a significant working capital deficiency, has incurred recurring net losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Marcum LLP

Marcum LLP New York, NY March 21, 2017

# **Consolidated Balance Sheets**

Assets  Current Assets; Cash Accounts receivable Prepaid expenses and other current assets  Total Current Assets Property and equipment, net Intangible assets, net Security deposit Total Assets  Scurrity deposit  Total Assets  Scurrity Liabilities  Accounts payable Accrued expenses and other current liabilities Accrued expenses and other current liabilities Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion Notes payable, non-current portion Notes payable, non-current portion Current Liabilities  Commitments and contingencies Stockholders' Deficiency; Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015, respectively  Tomal Current Liabilities  Common stock, \$0.01 par value; Authorized, 3,000,000 shares; none issued and outstanding at December 31, 2016 and 2015 Common stock, \$0.01 par value; Authorized, 3,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively Additional paid-in capital Accumulated deficit	31,822 6,000	2015	
Current Assets:  Cash Accounts receivable Prepaid expenses and other current assets  Total Current Assets Property and equipment, net Intangible assets, net Security deposit Total Assets  Liabilities and Stockholders' Deficiency  Current Liabilities: Accounts payable Accrued expenses and other current liabilities Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion Accrued interest, non-current portion Notes payable, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies Stockholders' Deficiency: Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015 Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively Additional paid-in capital	- ,-	2015	
Cash Accounts receivable Prepaid expenses and other current assets Total Current Assets Property and equipment, net Intangible assets, net Security deposit Total Assets Scurity deposit Total Current Liabilities: Accrued expenses and other current liabilities Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively Total Current Liabilities Accrued expenses, non-current portion Accrued interest, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively Total Liabilities Commitments and contingencies Stockholders' Deficiency: Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015 Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively Additional paid-in capital	- ,-		
Accounts receivable Prepaid expenses and other current assets  Total Current Assets Property and equipment, net Intangible assets, net Security deposit  Total Assets  S.  Liabilities and Stockholders' Deficiency Current Liabilities: Accounts payable Accrued expenses and other current liabilities Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities Accrued interest, non-current portion Accrued interest, non-current portion Accrued interest, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities Commitments and contingencies Stockholders' Deficiency: Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015 Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively Additional paid-in capital	- ,-		
Prepaid expenses and other current assets  Total Current Assets  Property and equipment, net Intangible assets, net  Security deposit  Total Assets  Liabilities and Stockholders' Deficiency  Current Liabilities:  Accounts payable  Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	6,000	\$ 166,555	
Total Current Assets  Property and equipment, net Intangible assets, net  Security deposit  Total Assets  Liabilities and Stockholders' Deficiency  Current Liabilities:  Accounts payable  Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued interest, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion  Notes payable, non-current portion  Notes payable, non-current portion  Notes possible, non-current portion  Notes possible interest, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, \$0,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital		93,375	
Property and equipment, net Intangible assets, net Security deposit  Total Assets  Scibilities and Stockholders' Deficiency  Current Liabilities:  Accounts payable Accrued expenses and other current liabilities Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion Accrued interest, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	23,854	29,348	
Intangible assets, net  Security deposit  Total Assets  Liabilities and Stockholders' Deficiency  Current Liabilities:  Accounts payable  Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	61,676	289,278	
Security deposit Total Assets  Liabilities and Stockholders' Deficiency  Current Liabilities: Accounts payable Accrued expenses and other current liabilities Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively Total Current Liabilities Accrued expenses, non-current portion Accrued expenses, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively Total Liabilities  Commitments and contingencies Stockholders' Deficiency: Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015 Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively.	508,594	643,087	
Total Assets  Liabilities and Stockholders' Deficiency  Current Liabilities:  Accounts payable  Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	963,845	1,038,741	
Liabilities and Stockholders' Deficiency  Current Liabilities:  Accounts payable  Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	45,900	45,900	
Current Liabilities:  Accounts payable  Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively	1,580,015	\$ 2,017,006	
Accounts payable Accrued expenses and other current liabilities Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities Accrued expenses, non-current portion Accrued interest, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies Stockholders' Deficiency: Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively Additional paid-in capital			
Accrued expenses and other current liabilities  Accrued interest  Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital			
Accrued interest Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities Accrued expenses, non-current portion Accrued interest, non-current portion Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	2,283,981	\$ 2,549,042	
Current portion of notes payable, net of debt discount of \$152,720 and \$150,286 at December 31, 2016 and 2015, respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	1,574,659	2,046,795	
respectively  Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	127,375	6,823	
Total Current Liabilities  Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital			
Accrued expenses, non-current portion  Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	1,858,845	 1,009,797	
Accrued interest, non-current portion  Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	5,844,860	 5,612,457	
Notes payable, non-current portion, net of debt discount of \$27,244 and \$7,999 at December 31, 2016 and 2015, respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	430,000	-	
respectively  Total Liabilities  Commitments and contingencies  Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	7,681	11,011	
Commitments and contingencies Stockholders' Deficiency: Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015 Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively Additional paid-in capital	297,756	302,001	
Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	6,580,297	 5,925,469	
Stockholders' Deficiency:  Preferred stock, \$0.01 par value; Authorized, 5,000,000 shares; none issued and outstanding at December 31, 2016 and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital			
and 2015  Common stock, \$0.001 par value; Authorized, 30,000,000 shares; Issued 4,699,035 and 3,338,661 shares at December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital			
December 31, 2016 and 2015, respectively; Outstanding 4,699,035 and 3,310,729 shares at December 31, 2016 and 2015, respectively  Additional paid-in capital	_	_	
Additional paid-in capital			
	4,699	3,339	
Accumulated deficit	36,954,817	29,443,704	
	(41,959,798)	(33,323,506)	
Treasury stock, at cost, 0 and 27,932 shares at December 31, 2016 and 2015, respectively	-	(32,000)	
Total Stockholders' Deficiency	(5,000,282)	 (3,908,463)	
Total Liabilities and Stockholders' Deficiency	1,580,015	\$ 2,017,006	
See Notes to these Consolidated Financial Statements			
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# **Consolidated Statements of Operations**

For the Years Ended,
December 31,

		December 31,		
		2016		2015
Revenues	\$	36,355	\$	628,915
Cost of sales		102		261,504
Gross Profit		36,253		367,411
Operating Expenses				
Marketing and promotion		86,451		168,352
Consulting		1,605,917		1,394,037
Research and development		2,883,563		2,105,059
General and administrative		3,257,579		3,870,325
Total Operating Expenses		7,833,510		7,537,773
Loss From Operations		(7,797,257)		(7,170,362)
Other Income (Expense)				
Interest expense		(221,608)		(263,583)
Amortization of debt discount		(542,336)		(339,443)
Loss on extinguishment of notes payable, net		(58,787)		(35,677)
Warrant modification expense		(28,486)		(114,415)
Gain on settlement of payables		12,182		
Total Other Expense		(839,035)		(753,118)
Net Loss	\$	(8,636,292)	\$	(7,923,480)
Net Loss Per Share				
- Basic and Diluted	<u>\$</u>	(2.10)	\$	(3.20)
Weighted Average Number of				
Common Shares Outstanding				
- Basic and Diluted		4,105,820		2,472,889

# Consolidated Statements of Changes in Stockholders' Deficiency For the Years Ended December 31, 2016 and 2015

				Additional				
	Comm	on St	ock	Paid-In	Accumulated	Treasu	ry Stock	_
	Shares		Amount	Capital	Deficit	Shares	Amount	Total
Balance - December 31, 2014	1,725,596	\$	1,726	\$ 18,541,907	\$ (25,400,026)	(27,932)	\$ (32,000)	\$ (6,888,393)
Shares and warrants issued for cash	395,425	Ф	395	2,033,305	\$ (23,400,020)	(27,932)	\$ (32,000)	2,033,700
	75,473			2,055,305	-	-	-	264,144
Exercise of warrants for purchase of common stock			76 54		-	-	-	
Conversion of notes payable and accrued interest into common stock	53,595			238,454	-	-	-	238,508
Shares issued in satisfaction of accrued services	943		1	8,480	-	-	-	8,481
Shares and warrants issued in connection with settlement agreement	4,230		4	151,996	-	-	-	152,000
Shares and warrants issued as debt discount in connection with notes	40.000		4.0	450.000				450.000
payable	10,000		10	178,883	-	-	-	178,893
Shares and warrants issued in exchange for notes payable and accrued								
interest	1,028,237		1,028	5,754,844	-	-	-	5,755,872
Warrant modifications	-		-	229,288	-	-	-	229,288
Beneficial conversion features related to convertible notes payable	-		-	87,788	-	-	-	87,788
Stock-based compensation:								
- common stock	43,698		44	177,603	-	-	-	177,647
- options and warrants	-		-	1,777,089	-	-	-	1,777,089
Impact of share rounding as a result of reverse stock split	1,464		1	(1)	-	-	-	-
Net loss	-		-	-	(7,923,480)	-	-	(7,923,480)
Balance - December 31, 2015	3,338,661	\$	3,339	\$ 29,443,704	\$ (33,323,506)	(27,932)	\$ (32,000)	\$ (3,908,463)
Shares and warrants issued for cash	956,833		956	3,497,382	-	-	-	3,498,338
Exercise of warrants for purchase of common stock	60,831		61	212,837			-	212,898
Conversion of notes payable and accrued interest into common stock	137,006		137	341,615	-	-	-	341,752
Shares issued in satisfaction of accrued services	13,208		13	27,540	-	-	-	27,553
Shares and warrants issued as debt discount in connection with notes								
payable	6,000		6	246,206	-	-	-	246,212
Shares and warrants issued in exchange for notes payable, convertible								
notes and accrued interest	167,027		167	352,426	-	-	-	352,593
Warrant modifications	-		-	96,634	-	-	-	96,634
Beneficial conversion features related to convertible notes payable	-		-	231,708	-	-	-	231,708
Stock-based compensation:								
- common stock	54,901		55	116,903	-	-	-	116,958
- options and warrants	_		-	2,436,702	_	_	_	2,436,702
Return of shares to treasury previously issued as compensation	-		_	-,,	_	(7,500)	(16,875)	(16,875)
Retirement of treasury shares	(35,432)		(35)	(48,840)	_	35,432	48,875	-
Net loss	(22, 32)		-	-	(8,636,292)			(8,636,292)
Balance - December 31, 2016	4,699,035	\$	4,699	\$ 36,954,817	\$ (41,959,798)		\$ -	\$ (5,000,282)

# **Consolidated Statements of Cash Flows**

For the Years Ended December 31,

		Detti	1001 51,	
		2016	2	015
Cash Flows From Operating Activities				
Net loss	\$	(8,636,292)	\$	(7,923,480)
Adjustments to reconcile net loss to net cash used in operating activities:				
Amortization of debt discount		542,336		339,443
Accretion of interest expense		40,052		85,086
Depreciation and amortization		258,425		213,784
Stock-based compensation		2,536,785		1,954,736
Loss on extinguishment of note payables, net		58,787		35,677
Warrant modification expense		28,486		114,415
Gain on settlement of payables		(12,182)		-
Changes in operating assets and liabilities:				
Accounts receivable		87,375		(93,375)
Prepaid expenses and other current assets		5,494		(6,833)
Accounts payable		(113,151)		1,381,407
Accrued interest		120,552		(81,387)
Accrued expenses and other current liabilities		80,658		1,022,813
Deferred revenues		<u>-</u>		(164,349)
Total Adjustments		3,633,617		4,801,417
Net Cash Used In Operating Activities		(5,002,675)		(3,122,063)
Cash Flows From Investing Activities				<u> </u>
Purchases of property and equipment		(188,764)		(408,069)
License maintenance costs		-		(75,000)
Net Cash Used In Investing Activities		(188,764)		(483,069)
Cash Flows From Financing Activities	<u> </u>			
Proceeds from notes payable		1,894,000		1,210,015
Repayments of notes payable		(476,500)		(5,000)
Advances from director, officer and family member of officer		292,090		564,105
Repayments of advances from an officer and a director		(364,120)		(387,075)
Proceeds from exercise of warrants		212,898		264,144
Sales of common stock and warrants for cash		3,498,338		2,033,700
Net Cash Provided By Financing Activities		5,056,706		3,679,889
Net (Decrease) Increase In Cash		(134,733)		74,757
Cash - Beginning		166,555		91,798
Cash - Ending	\$	31,822	\$	166,555

# **Consolidated Statements of Cash Flows -- Continued**

For The Years Ended December 31,

2016		2015	
		2015	
30,406	\$	61,453	
96,634	\$	114,873	
246,212	\$	178,893	
352,593	\$	5,720,195	
341,752	\$	238,508	
27,553	\$	8,481	
-	\$	44,379	
231,708	\$	87,788	
-	\$	333,117	
-	\$	152,000	
-	\$	139,729	
-	\$	65,000	
-	\$	5,000	
48,875	\$	-	
	96,634 246,212 352,593 341,752 27,553 - 231,708	96,634 \$ 246,212 \$ 352,593 \$ 341,752 \$ 27,553 \$ - \$ 231,708 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	

### **Notes to Consolidated Financial Statements**

### Note 1 - Business Organization and Nature of Operations

BioRestorative Therapies, Inc. has two wholly-owned subsidiaries, Stem Pearls, LLC ("Stem Pearls") and Stem Cell Cayman Ltd. ("Cayman"), which was formed in the Cayman Islands (collectively, "BRT" or the "Company"). On December 19, 2016, the Company submitted its request to the appropriate Cayman authorities for the dissolution of Cayman and is currently awaiting confirmation of the dissolution (See Note 3 – Summary of Significant Accounting Policies – Principles of Consolidation). BRT develops therapeutic products and medical therapies using cell and tissue protocols, primarily involving adult stem cells. BRT's website is at www.biorestorative.com. BRT is currently developing a Disc/Spine Program referred to as "brtxDISC". Its lead cell therapy candidate, BRTX-100, is a product formulated from autologous (or a person's own) cultured mesenchymal stem cells collected from the patient's bone marrow. The product is intended to be used for the non-surgical treatment of protruding and bulging lumbar discs in patients suffering from chronic lumbar disc disease. BRT is also engaging in research efforts with respect to a platform technology utilizing brown adipose (fat) for therapeutic purposes to treat metabolic disease and has labeled this initiative its "ThermoStem Program." Through the program, BRT is developing a cell-based therapy to target type 2 diabetes, obesity and other metabolic disorders using brown adipose (fat) derived stem cells to generate brown adipose tissue ("BAT"). BAT is intended to mimic naturally occurring brown adipose depots that regulate metabolic homeostasis in humans. Further, BRT has licensed a patented curved needle device that is a needle system to allow access to difficult to locate regions for the delivery or removal of fluids and other substances. BRT's Stem Pearls brand offers plant stem cell-based cosmetic skincare products that are available for purchase online at www.stempearls.com.

Effective January 1, 2015, the Company changed its state of incorporation from the State of Nevada to the State of Delaware pursuant to a plan of conversion, dated December 22, 2014 (the "Plan of Conversion"). Pursuant to the Plan of Conversion, the Company also adopted new bylaws, which became effective on January 1, 2015.

Effective July 7, 2015, pursuant to authority granted by the stockholders of the Company, the Company implemented a 1-for-20 reverse split of the Company's issued and outstanding common stock (the "Reverse Split") and a reduction in the number of shares of common stock authorized to be issued by the Company from 200,000,000 to 30,000,000. All share and per share information has been retroactively adjusted to reflect the Reverse Split for all periods presented.

# Note 2 - Going Concern and Management's Plans

As of December 31, 2016, the Company had a working capital deficiency and a stockholders' deficiency of \$5,783,184 and \$5,000,282, respectively. During the years ended December 31, 2016 and 2015, the Company incurred net losses of \$8,636,292 and \$7,923,480, respectively. These conditions indicate that there is substantial doubt about the Company's ability to continue as a going concern within the next twelve months from the filing date of this report.

The Company's primary source of operating funds since inception has been equity and debt financings. The Company intends to continue to raise additional capital through debt and equity financings. There is no assurance that these funds will be sufficient to enable the Company to fully complete its development activities or attain profitable operations. If the Company is unable to obtain such additional financing on a timely basis or, notwithstanding any request the Company may make, the Company's debt holders do not agree to convert their notes into equity or extend the maturity dates of their notes, the Company may have to curtail its development, marketing and promotional activities, which would have a material adverse effect on the Company's business, financial condition and results of operations, and ultimately the Company could be forced to discontinue its operations and liquidate.

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP"), which contemplate continuation of the Company as a going concern and the realization of assets and satisfaction of liabilities in the normal course of business. The carrying amounts of assets and liabilities presented in the financial statements do not necessarily purport to represent realizable or settlement values. The consolidated financial statements do not include any adjustment that might result from the outcome of this uncertainty.

### **Notes to Consolidated Financial Statements**

### Note 2 - Going Concern and Management's Plans - Continued

Subsequent to December 31, 2016, the Company has received aggregate equity proceeds (including proceeds from the exercise of common stock purchase warrants) and debt proceeds of \$945,000 and \$200,000, respectively, debt and accrued interest of \$325,000 and \$9,679, respectively, has been converted into or exchanged for common stock, \$89,000 of debt and net short-term advances have been repaid and the due date for the repayment of \$322,000 of debt has been extended through April 2017. As a result, the Company expects to have the cash required to fund its operations through April 2017. While there can be no assurance that it will be successful, the Company is in negotiations to raise additional capital. As of the filing date of this report, the Company has notes payable with an aggregate principal balance of \$427,500 which are past due. The Company is currently in the process of negotiating extensions or discussing conversions to equity with respect to these notes. However, there can be no assurance that the Company will be successful in extending or converting these notes. See Note 11 – Subsequent Events for additional details.

## Note 3 - Summary of Significant Accounting Policies

### Principles of Consolidation

The consolidated financial statements of the Company include the accounts of Cayman and Stem Pearls. All significant intercompany transactions have been eliminated in the consolidation. As discussed above, the Company is in the process of dissolving Cayman, which had no material assets, liabilities or operations (other than intercompany balances) and is no longer needed to facilitate certain financings.

## Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the dates of the financial statements and the reported amounts of revenue and expenses during the periods. The Company's significant estimates and assumptions include the recoverability and useful lives of long-lived assets, the fair value of the Company's stock, stock-based compensation, warrants issued in connection with notes payable and the valuation allowance related to the Company's deferred tax assets. Certain of the Company's estimates, including the carrying amount of the intangible assets, could be affected by external conditions, including those unique to the Company and general economic conditions. It is reasonably possible that these external factors could have an effect on the Company's estimates and could cause actual results to differ from those estimates.

### Concentrations

Two pharmaceutical clients comprised substantially all of the Company's revenue during the year ended December 31, 2015. One license comprised substantially all of the Company's revenue during the year ended December 31, 2016. See Revenue Recognition – Research and Development Agreements below.

#### Cash

The Company maintains cash in bank accounts, which, at times, may exceed federally insured limits. The Company has not experienced any losses in such accounts, periodically evaluates the creditworthiness of the financial institutions and has determined the credit exposure to be negligible.

# Property and Equipment, net

Property and equipment are stated at cost, net of accumulated depreciation which is recorded commencing at the in-service date using the straight-line method at rates sufficient to charge the cost of depreciable assets to operations over their estimated useful lives, which range from 3 to 5 years. Leasehold improvements are amortized over the lesser of (a) the useful life of the asset; or (b) the remaining lease term. Maintenance and repairs are charged to operations as incurred. The Company capitalizes cost attributable to the betterment of property and equipment when such betterment extends the useful life of the assets.

### **Notes to Consolidated Financial Statements**

#### Note 3 – Summary of Significant Accounting Policies – Continued

## Intangible Assets

Intangible assets are comprised of trademarks and licenses with original estimated useful lives of 10 and 17.7 years, respectively. Once placed into service, the Company amortizes the cost of the intangible assets over their estimated useful lives on a straight-line basis.

## Impairment of Long-lived Assets

The Company reviews for the impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. While the Company's near term liquidity is tight, historically the Company has been successful in raising capital as needed (although there can be no assurance that the Company will continue to be successful in raising capital as needed). The Company continues to progress its scientific agenda and meet related milestones. The Company has not identified any impairment losses.

## Revenue Recognition

### Research and Development Agreements

The Company's policy relating to research and development agreements is to recognize research and development revenues associated with such agreements either (a) on a straight-line basis over the term of the agreement, or (b) in accordance with the milestone method of revenue recognition, depending on the nature of the contract terms, subject to potential acceleration upon achievement of contractually specified deliverables.

As of December 31, 2015, the Company completed all of its obligations under research and development agreements entered into during 2014. During the years ended December 31, 2016 and 2015, the Company recognized \$0 and \$609,490, respectively, related to the Company's research and development agreements.

### Other

The Company's policy is to recognize product sales when the risk of loss and title to the product transfers to the customer, after estimating potential returns. The Company recognizes sublicensing and royalty revenue when all of the following have occurred: (i) persuasive evidence of an arrangement exists, (ii) the service is completed without further obligation, (iii) the sales price to the customer is fixed or determinable, and (iv) collectability is reasonably assured.

In November 2015, the Company and a stem cell treatment company ("SCTC") entered into an amendment to a January 27, 2012 license agreement between them. Pursuant to the amendment, effective November 30, 2015, the Company granted to the SCTC a non-exclusive sublicense to use, and the right to sublicense to third parties the right to use, in certain locations in the United States, certain intellectual property related to stem cell disc procedures (that originally was licensed to the Company by the SCTC pursuant to the January 27, 2012 license agreement). In consideration of the sublicense, the SCTC has agreed to pay the Company royalties on a per disc procedure basis.

During the years ended December 31, 2016 and 2015, the Company recognized \$36,000 and \$19,000, respectively, of revenue related to the Company's sublicense agreements.

During the years ended December 31, 2016 and 2015, the Company recognized revenue related to sales of Stem Pearls skincare products of \$355 and \$425, respectively, with a related cost of sales of \$102 and \$54, respectively.

# **Income Taxes**

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of items that have been included or excluded in the financial statements or tax returns. Deferred tax assets and liabilities are determined on the basis of the difference between the tax basis of assets and liabilities and their respective financial reporting amounts ("temporary differences") at enacted tax rates in effect for the years in which the temporary differences are expected to reverse.

### **Notes to Consolidated Financial Statements**

### Note 3 – Summary of Significant Accounting Policies – Continued

### Income Taxes - Continued

The Company utilizes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

Management has evaluated and concluded that there were no material uncertain tax positions requiring recognition in the Company's consolidated financial statements as of December 31, 2016 and 2015. The Company does not expect any significant changes in its unrecognized tax benefits within twelve months of the reporting date.

The Company's policy is to classify assessments, if any, for tax related interest as interest expense and penalties as general and administrative expenses in the consolidated statements of operations.

### Net Loss Per Common Share

Basic loss per common share is computed by dividing net loss by the weighted average number of vested common shares outstanding during the period. Diluted earnings per share reflects the potential dilution that could occur if securities or other instruments to issue common stock were exercised or converted into common stock.

The following securities are excluded from the calculation of weighted average dilutive common shares because their inclusion would have been anti-dilutive:

	Decembe	December 31,		
	2016	2015		
Options	2,168,950	1,330,450		
Warrants	2,953,651	1,066,930		
Convertible notes	211,162	148,708		
Total potentially dilutive shares	5,333,763	2,546,088		

### Stock-Based Compensation

The Company measures the cost of services received in exchange for an award of equity instruments based on the fair value of the award. For employees, the fair value of the award is measured on the grant date and for non-employees, the fair value of the award is generally re-measured on vesting dates and interim financial reporting dates until the service period is complete. The fair value amount is then recognized over the period during which services are required to be provided in exchange for the award, usually the vesting period. Since the shares underlying the Company's 2010 Equity Participation Plan (the "Plan") were registered on May 27, 2014, the Company estimates the fair value of the awards granted under the Plan based on the market value of its freely tradable common stock as reported on the OTCQB market. The fair value of the Company's restricted equity instruments was estimated by management based on observations of the cash sales prices of both restricted shares and freely tradable shares. Awards granted to directors are treated on the same basis as awards granted to employees. Upon the exercise of an option or warrant, the Company issues new shares of common stock out of its authorized shares.

# Advertising

Advertising costs are charged to operations as incurred. For the years ended December 31, 2016 and 2015, the Company incurred advertising costs of \$17,972 and \$23,467, respectively. Advertising expense is reflected in marketing and promotion expenses in the consolidated statements of operations.

# Research and Development

Research and development expenses are charged to operations as incurred. For the years ended December 31, 2016 and 2015, the Company incurred research and development expenses of \$2,883,563 and \$2,105,059, respectively.

# **Notes to Consolidated Financial Statements**

#### Note 3 – Summary of Significant Accounting Policies – Continued

# Fair Value of Financial Instruments

The Company measures the fair value of financial assets and liabilities based on the guidance of ASC 820 "Fair Value Measurements and Disclosures" ("ASC 820").

ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. ASC 820 describes three levels of inputs that may be used to measure fair value:

- Level 1 quoted prices in active markets for identical assets or liabilities
- Level 2 quoted prices for similar assets and liabilities in active markets or inputs that are observable
- Level 3 inputs that are unobservable (for example, cash flow modeling inputs based on assumptions)

The carrying amounts of accrued liabilities approximate fair value due to the short-term nature of these instruments. The carrying amounts of our short-term credit obligations approximate fair value because the effective yields on these obligations, which include contractual interest rates, taken together with other features such as concurrent issuance of warrants, are comparable to rates of returns for instruments of similar credit risk.

# Convertible Instruments

The Company bifurcates conversion options from their host instruments and accounts for them as free standing derivative financial instruments according to certain criteria. The criteria include circumstances in which (a) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (b) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur and (c) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. An exception to this rule is when the host instrument is deemed to be conventional.

When the Company has determined that the embedded conversion options should not be bifurcated from their host instruments, the Company records, when necessary, discounts to convertible notes for the intrinsic value of conversion options embedded in debt instruments (the beneficial conversion feature) based upon the differences between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized over the term of the related debt to their stated date of redemption.

# Subsequent Events

The Company evaluates events that have occurred after the balance sheet date but before the financial statements are issued. Based upon the evaluation, the Company did not identify any recognized or non-recognized subsequent events that would have required adjustment or disclosure in the consolidated financial statements, except as disclosed.

# **Notes to Consolidated Financial Statements**

#### Note 3 – Summary of Significant Accounting Policies – Continued

# Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers," ("ASU 2014-09"). ASU 2014-09 supersedes the revenue recognition requirements in ASC 605 - Revenue Recognition and most industry-specific guidance throughout the ASC. The standard requires that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. ASU 2014-09 should be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application. To allow entities additional time to implement systems, gather data and resolve implementation questions, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, in August 2015, to defer the effective date of ASU No. 2014-09 for one year, which is fiscal years beginning after December 15, 2017. The Company is currently evaluating the impact of the adoption of ASU 2014-09 on its consolidated financial statements or disclosures.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements – Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern" ("ASU 2014-15"). ASU 2014-15 explicitly requires management to evaluate, at each annual or interim reporting period, whether there are conditions or events that exist which raise substantial doubt about an entity's ability to continue as a going concern and to provide related disclosures. ASU 2014-15 is effective for annual periods ending after December 15, 2016, and annual and interim periods thereafter, with early adoption permitted. The adoption of this standard did not have a material impact on the Company's financial statement disclosures.

In April 2015, the FASB issued ASU No. 2015-03, "Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs", or ASU 2015-03. ASU 2015-03 amends the existing guidance to require that debt issuance costs be presented in the balance sheet as a deduction from the carrying amount of the related debt liability instead of as a deferred charge. ASU 2015-03 is effective on a retrospective basis for annual and interim reporting periods beginning after December 15, 2015; earlier adoption is permitted. Additionally, in August 2015 the FASB issued guidance expanding the April 2015 update (ASU No. 2015-15). It states that, given the absence of authoritative guidance within the update, the SEC staff would not object to an entity deferring and presenting debt issuance costs as an asset for revolving lines of credit and subsequently amortizing the deferred debt issuance costs ratably over the term of the arrangement, regardless of whether there are any outstanding borrowings on the line of credit. This guidance is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years, with early adoption permitted for financial statements that have not been previously issued. Full retrospective application is required. The adoption of this standard did not have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). ASU 2016-02 requires an entity to recognize assets and liabilities arising from a lease for both financing and operating leases. ASU 2016-02 will also require new qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company is currently evaluating ASU 2016-02 and its impact on its consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, "Compensation – Stock Compensation (Topic 718)" ("ASU 2016-09"). ASU 2016-09 requires an entity to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, with early adoption permitted. The Company is currently evaluating ASU 2016-09 and its impact on its consolidated financial statements or disclosures.

# **Notes to Consolidated Financial Statements**

# Note 3 – Summary of Significant Accounting Policies – Continued

# Recently Issued Accounting Pronouncements - Continued

In April 2016, the FASB issued ASU 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing" ("ASU 2016-10"). The amendments in this update clarify the following two aspects to Topic 606: identifying performance obligations and the licensing implementation guidance, while retaining the related principles for those areas. The entity first identifies the promised goods or services in the contract and reduces the cost and complexity. An entity evaluates whether promised goods and services are distinct. Topic 606 includes implementation guidance on determining whether an entity's promise to grant a license provides a customer with either a right to use the entity's intellectual property (which is satisfied over time). ASU 2016-10 is effective for fiscal years beginning after December 15, 2017, including interim reporting periods within that reporting period. The Company is currently evaluating ASU 2016-10 and its impact on its consolidated financial statements or disclosures.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"). The new standard will make eight targeted changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. The new standard is effective for fiscal years beginning after December 15, 2017. The Company will require adoption on a retrospective basis unless it is impracticable to apply, in which case the Company would be required to apply the amendments prospectively as of the earliest date practicable. The Company is currently evaluating ASU 2016-15 and its impact on its consolidated financial statements or disclosures.

# Note 4 - Property and Equipment, net

Property and equipment include the following:

	December 31,				
		2016		2015	
Office equipment	\$	2,848	\$	9,494	
Medical equipment		446,506		418,280	
Furniture and fixtures		121,625		126,150	
Computer software and equipment		74,572		85,118	
Leasehold improvements	<u> </u>	304,661		301,610	
		950,212		940,652	
Less: accumulated depreciation		(441,618)		(297,565)	
Property and equipment, net	\$	508,594	\$	643,087	

During the year ended December 31, 2016, the Company disposed of fully depreciated property and equipment in the amount of \$39,476. Depreciation expense amounted to \$183,529 and \$139,793 for the years ended December 31, 2016 and 2015, respectively. Depreciation expense is reflected in general and administrative expenses and research and development expenses in the consolidated statement of operations.

# **Notes to Consolidated Financial Statements**

# Note 5 – Intangible Assets

On January 27, 2012, the Company entered into a license agreement with the SCTC (as amended in March 2012 and November 2015, the "SCTC Agreement"). On April 6, 2012 (the "Closing Date"), the Company and SCTC closed on the SCTC Agreement. Pursuant to the SCTC Agreement, the Company obtained, among other things, a worldwide, exclusive, royalty-bearing license from SCTC to utilize or sublicense a certain medical device patent for the administration of specific cells and/or cell products to the disc and/or spine (and other parts of the body) and a worldwide (excluding Asia and Argentina), exclusive, royalty-bearing license to utilize or sublicense a certain method for culturing cells. On March 5, 2015, the Company made a \$75,000 cash payment to retain the exclusivity of the license. Pursuant to the license agreement with SCTC, unless certain performance milestones are or have been satisfied, the Company would be required to pay to SCTC \$150,000 by April 2017 and an additional \$250,000 by April 2019 in order to maintain its exclusive rights with regard to the disc/spine technology. In February 2017, in connection with the Company receiving clearance from the Food and Drug Administration (the "FDA") to proceed with a Phase 2 clinical trial, the Company believes that it has satisfied a performance milestone such that the Company would no longer be required to pay to the STC a minimum amount of \$150,000 by April 2017 to retain exclusive rights with regard to the disc/spine technology.

Intangible assets consist of the following:

	Patents and Trademarks	Licenses	Accumulated Amortization	Total
Balance as of January 1, 2015	\$ 3,676	\$ 1,226,500	\$ (192,444)	\$ 1,037,732
Additions	-	75,000	-	75,000
Amortization expense	-	-	(73,991)	(73,991)
Balance as of December 31, 2015	3,676	1,301,500	(266,435)	1,038,741
Amortization expense	 <u>-</u>	-	(74,896)	(74,896)
Balance as of December 31, 2016	\$ 3,676	\$ 1,301,500	\$ (341,331)	\$ 963,845
Weighted average remaining amortization				
period at December 31, 2016 in years	 4.0	12.9		

Amortization of intangible assets consists of the following:

	Patents and Trademarks Licenses			Accumulated Amortization		
Balance as of January 1, 2015	\$ 1,472	\$	190,972	\$	192,444	
Amortization expense	 368		73,623		73,991	
Balance as of December 31, 2015	1,840		264,595		266,435	
Amortization expense	 368		74,528		74,896	
Balance as of December 31, 2016	\$ 2,208	\$	339,123	\$	341,331	

Amortization expense is reflected in general and administrative expenses in the consolidated statements of operations. Based upon the current intangible assets as of December 31, 2016, amortization expense is projected to be approximately \$75,000 per annum through 2029.

# **Notes to Consolidated Financial Statements**

# Note 6 - Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities are comprised of the following:

		December 31,				
		2016		2015		
Credit card payable	\$	1,778	\$	3,171		
Accrued payroll		880,293		1,010,633		
Advances from related parties		-		87,030		
Accrued research and development expenses		406,175		446,175		
Accrued general and administrative expenses		233,468		456,182		
Deferred rent		52,945		43,604		
Accrued expenses, current portion		1,574,659		2,046,795		
Accrued expenses, non-current portion		430,000		-		
Total accrued expenses	\$	2,004,659	\$	2,046,795		

During the year ended December 31, 2016, the Company received an aggregate of \$292,090 in non-interest bearing advances from an officer, directors and a consultant of the Company and made aggregate repayments of \$364,120. During the year ended December 31, 2015, the Company received an aggregate of \$564,105 in non-interest bearing advances from an officer, directors, a family member of an officer and a consultant of the Company and made aggregate repayments of \$387,075, converted a related party advance in the amount of \$65,000 into a non-interest bearing note payable in the principal amount of \$75,000 with a maturity date of October 30, 2015 (see Note 7) and, in December 2015, exchanged an advance in the amount of \$25,000 for 6,250 shares of common stock valued at \$14,063 and a five-year warrant to purchase 6,250 shares of common stock at an exercise price of \$4.00 per share with a grant date value of \$11,063. During the year ended December 31, 2015, the Company recognized a \$126 loss on the extinguishment of the advance in connection with the exchange for the shares of common stock and a warrant.

As of December 31, 2016, the Company reclassified accrued expenses in the aggregate amount of \$255,000 to accrued expenses, non-current portion, on the consolidated balance sheets related to accrued consulting and directors fees that were exchanged for shares of common stock and warrants subsequent to December 31, 2016. See Note 11 – Subsequent Events for additional details regarding the exchange of accrued consulting and directors fees

# **Notes to Consolidated Financial Statements**

Note 7 - Notes Payable

A summary of the notes payable activity during the years ended December 31, 2016 and 2015 is presented below:

	Re	elated Party Notes		Convertible Notes		Other Notes		Debt Discount		Total
Outstanding, January 1, 2015	\$	4,410,937	\$	175,000	\$	1,265,559	\$	(113,257)	\$	5,738,239
Issuances	Ψ	150,000	Ψ	735,000[1]	Ψ	478,018[1]	Ψ	(115,257)	Ψ	1,363,018
Indebtedness satisfied via settlement		-		-		(5,000)		_		(5,000)
Exchanges for equity		(4,410,937)		(266,667)		(877,873)		-		(5,555,477)
Conversions to equity		-		(223,333)		-		-		(223,333)
Repayments		-		-		(5,000)		-		(5,000)
Recognition of debt discount		-		-		-		(469,557)[1]		(469,557)
Accretion of interest expense		-		-		-		85,086 [1]		85,086
Amortization of debt discount		-		-		-		339,443		339,443
Recharacterization of accrued interest as principal		-		-		44,379[2]		-		44,379
Outstanding, December 31, 2015	\$	150,000	\$	420,000[3]	\$	900,083	\$	(158,285)	\$	1,311,798
Issuances		697,500		530,000		724,500[1]		-		1,952,000
Indebtedness satisfied via settlement		-		-		-		-		-
Exchanges for equity		-		(235,000)		(49,018)		-		(284,018)
Conversion to equity		=		(325,000)		-		=		(325,000)
Repayments		(150,000)		-		(326,500)		-		(476,500)
Recognition of debt discount		-		-		-		(604,067)[1]		(604,067)
Accretion of interest expense		-		-		-		40,052 [1]		40,052
Amortization of debt discount				<u> </u>		-		542,336		542,336
Outstanding, December 31, 2016	\$	697,500	\$	390,000[3]	\$	1,249,065	\$	(179,964)	\$	2,156,601
Outstanding, December 31, 2015	\$	150,000	\$	420,000	\$	900,083	\$	(158,285)	\$	1,311,798
Less: current portion, December 31, 2015		(150,000)		(110,000)		(900,083)		150,286		(1,009,797)
Non-current portion, December 31, 2015 [4]	\$		\$	310,000	\$		\$	(7,999)	\$	302,001
Two current portion, Beccinoci 31, 2013 [1]	<u> </u>		Ť		Ť		Ť	(,,,,,,	Ť	
Outstanding, December 31, 2016	\$	697,500	\$	390,000	\$	1,249,065	\$	(179,964)	\$	2,156,601
Less: current portion, December 31, 2016		(430,000)		(345,000)		(1,236,565)		152,720		(1,858,845)
Non-current portion, December 31, 2016 [4]	\$	267,500	\$	45,000	\$	12,500	\$	(27,244)	\$	297,756

- [1] During the years ended December 31, 2016 and 2015, notes with an aggregate principal amount of \$432,000 and \$538,018, respectively, bear no interest and were issued for cash consideration of \$374,000 and \$450,015, respectively. The difference between the principal amount of the notes and the cash received of \$58,000 and \$88,003, respectively, was recorded as debt discount and is being accreted to interest expense over the term of the notes. During the year ended December 31, 2015 the Company issued a note payable in the principal amount of \$75,000 for a short-term advance from a related party in the amount of \$65,000.
- [2] During the year ended December 31, 2015, in connection with the extension of certain notes payable, an aggregate of \$44,379 of accrued interest was added to the aggregate principal balance of the notes.
- [3] As of December 31, 2016 and 2015, a designated portion of convertible notes with an aggregate principal balance of \$390,000 and \$420,000, respectively, were convertible into shares of common stock at the election of the Company near maturity. In the event the Company exercised or exercises that conversion right on a designated portion of such principal balance, the holder had or has the right to accelerate the conversion of up to \$296,250 and \$197,500, respectively, of principal into shares of common stock.
- [4] As of December 31, 2016 and 2015, the Company reclassified principal in the aggregate amount of \$297,756 and \$302,001, respectively (net of debt discount of \$27,244 and \$7,999, respectively) and accrued interest in the aggregate amount of \$7,681 and \$11,011, respectively to notes payable, non-current portion, net of debt discount and accrued interest, non-current portion, respectively, on the consolidated balance sheets related to outstanding notes payable that were converted into or exchanged for shares of common stock and warrants subsequent to December 31, 2016 and 2015, respectively. See Note 11 Subsequent Events for additional details regarding notes payable.

# **Notes to Consolidated Financial Statements**

#### Note 7 – Notes Payable – Continued

# Related Party Notes

In May 2015, Cayman and a single entity (the "Bermuda Lender") agreed to extend the maturity date of a note payable in the original principal amount of \$500,000 (the "\$500,000 Bermuda Lender Note") (with an outstanding principal balance of \$410,937) from May 7, 2015 to June 30, 2015 (the "New Maturity Date"). The Bermuda Lender waived any and all defaults under the \$500,000 Bermuda Lender Note, including with respect to the failure by the Company to pay to the Bermuda Lender, pursuant to the \$500,000 Bermuda Lender Note, the aggregate amount of \$316,297 received by the Company from its research and development agreements.

In May 2015, the Company and the Bermuda Lender agreed to exchange the \$500,000 Bermuda Lender Note and a note payable to the Bermuda Lender in the principal amount of \$4,000,000 (with an aggregate principal amount of \$4,410,937 and aggregate accrued interest of \$69,436) for 746,730 shares of common stock with a grant date value of \$3,733,645 and an immediately vested five-year warrant to purchase 186,682 shares of common stock at an exercise price of \$15.00 per share with a grant date fair value of \$672,056. In connection with the exchange, the Company extended the expiration date of a previously outstanding warrant to purchase 40,000 shares of common stock from December 31, 2015 to December 31, 2017 and recognized a warrant modification charge of \$80,000, which represents the incremental value of the modified warrant and new warrant combined, as compared to the original warrant value, both valued as of the modification date. During the year ended December 31, 2015, the Company recognized a \$5,327 loss on the extinguishment of notes payable in connection with the exchange for the shares of common stock and a warrant.

In October 2015, the Company borrowed \$150,000 from an affiliate of the Bermuda Lender and issued to the affiliate a two month note in the principal amount of \$150,000. The note provided for interest at a rate of 10% per annum and that, in the event that, prior to the maturity date, the Company received any proceeds from a public equity offering or monies in payment of an accounts receivable, then, the Company would be obligated to prepay the principal and interest on a dollar-for-dollar basis to the extent of such monies so received, but not to exceed the outstanding principal and interest balance of the note. The note was secured by a security interest in a patent held by the Company associated with its brown fat program. In December 2015, the Company and the affiliate of the Bermuda Lender extended the maturity date of the note to March 9, 2016. In connection with the extension, the Company reduced the exercise price of warrants to purchase an aggregate 239,182 shares of common stock held by the Bermuda Lender from \$15.00 per share to \$4.00 per share. As a result of the warrant modification, the Company recognized \$98,739 of debt discount which will be amortized over the term of the note. In July 2016, the Company repaid the \$150,000 outstanding balance of the note.

As of December 31, 2016 and 2015, the Bermuda Lender was a related party as a result of having in excess of a 10% beneficial ownership interest in the Company's common stock.

On June 30, 2016, the Company borrowed \$500,000 from Tuxis Trust (the "Trust"). A director and principal shareholder of the Company serves as a trustee of the Trust, which was established for the benefit of his immediate family. The promissory note evidencing the loan provides for the payment of the principal amount, together with interest at the rate of 10% per annum, on July 1, 2017. In the event that, prior to maturity, the Company receives net proceeds of \$10,000,000 from a single equity or debt financing (as opposed to a series of related or unrelated financings), the Trust has the right to require that the Company prepay the amount due under the note (subject to the consent of the party that provided the particular financing). In consideration of the loan, the Company issued to the Trust a five-year, immediately vested warrant for the purchase of 40,000 shares of common stock of the Company at an exercise price of \$4.00 per share. The \$55,659 relative fair value of the warrant has been recorded as debt discount and will be amortized over the term of the note.

During the year ended December 31, 2016, the Company issued notes payable with an aggregate principal balance of \$197,500 for aggregate cash consideration of \$190,000 to directors of the Company. The notes mature on dates ranging from January 31, 2017 to February 5, 2017 and range from bearing no interest to 10% interest per annum, payable monthly. The \$7,500 difference between the principal amount of the notes and the cash received was recorded as debt discount and is being amortized to interest expense over the term of notes. In connection with the note issuances, the Company (i) issued one of the directors a five-year, immediately vested warrant to purchase 8,000 shares of common stock at an exercise price of \$4.00 per share and (ii) extended outstanding warrants held by a director to purchase an aggregate of 844,444 shares of common stock with exercise prices ranging from \$4.50 to \$5.00 per share from expiration dates ranging from November 2017 to March 2018 to a new expiration date of December 31, 2018. The \$11,959 relative fair value of the issued warrant and the \$55,028 relative fair value of the warrant modifications have been recorded as debt discount and are being amortized over the term of their respective notes.

# **Notes to Consolidated Financial Statements**

#### Note 7 – Notes Payable - Continued

# Related Party Notes - Continued

See Note 10 - Stockholders' Deficiency - Warrant and Option Valuation and Note 10 - Stockholders' Deficiency - Stock Warrants regarding details for the valuation of warrants and the Black-Scholes valuation assumptions.

# Convertible Notes

# Issuances

During the year ended December 31, 2015, the Company issued convertible notes with an aggregate principal balance of \$735,000 for aggregate cash consideration of \$725,000. The convertible notes matured between July 2015 and June 2016 and accrued interest at rates ranging from 1% to 12% per annum payable at maturity. The \$10,000 difference between the principal amount of the convertible notes and the cash received was recorded as debt discount and was amortized to interest expense over the term of the convertible notes. The convertible notes were convertible into shares of the Company's common stock at the election of the Company during the five days prior to maturity and ending on the day immediately prior to maturity at a conversion price equal to the greater of (a) a range of 55% to 65% of the fair value of the Company's common stock or (b) \$2.00 or \$3.00 per share depending on the note. With respect to \$272,500 principal amount of the notes, in the event that the Company elected to convert a portion of the principal outstanding under the notes into common stock, the holder had the right to convert up to the remaining principal into shares of common stock at the conversion price. In connection with the issuance of the convertible notes, the Company issued five-year, immediately vested warrants to purchase an aggregate of 30,885 shares of common stock at exercise prices ranging from \$5.00 to \$10.00 per share. The aggregate relative fair value of the warrants of \$90,018 has been recorded as debt discount and was amortized over the term of the convertible notes. See "Conversions, Exchanges, and Other" below.

During the year ended December 31, 2016, the Company issued convertible notes with an aggregate principal balance of \$530,000 which mature on dates ranging from September 2016 to August 2017 and accrue interest at 10% per annum payable at maturity. The convertible notes are convertible into shares of the Company's stock at the election of the Company during the five days prior to maturity and ending on the day immediately prior to maturity at a conversion price equal to the greater of (a) a range of 60% to 62% of the fair value of the Company's common stock or (b) \$0.75, \$1.00, or \$2.00 per share depending on the note, With respect to \$296,250 principal amount of the notes, in the event that the Company elects to convert a portion of the principal outstanding under the notes into common stock, the holder will have the right to convert up to the remaining principal into shares of common stock at the conversion price. In connection with the issuance of convertible notes, the Company issued five-year, immediately vested warrants to purchase an aggregate of 33,750 shares of common stock at an exercise price of \$4.00 per share. The aggregate relative fair value of the \$53,150 has been recorded as debt discount and is being amortized over the term of the convertible notes.

# Conversions, Exchanges and Other

During the year ended December 31, 2015, the Company elected to convert certain convertible notes with an aggregate principal balance of \$223,333 and aggregate accrued interest of \$15,175 into an aggregate of 53,595 shares of common stock at conversion prices ranging from \$3.00 to \$5.16 per share.

During the year ended December 31, 2015, the Company and certain lenders agreed to exchange certain convertible notes with an aggregate principal balance of \$266,667, along with accrued and unpaid interest of \$12,580, for an aggregate of 92,875 shares of common stock and immediately vested, five-year warrants to purchase an aggregate of 39,092 shares of common stock at an exercise price of \$4.00 per share. The common stock and warrants had an aggregate grant date value of \$288,060 and, as a result, the Company recorded a loss on extinguishment of \$8,813.

# **Notes to Consolidated Financial Statements**

#### Note 7 – Notes Payable – Continued

# Convertible Notes - Continued

Conversions, Exchanges and Other - Continued

During the year ended December 31, 2016, the Company elected to convert certain convertible notes with an aggregate principal balance of \$325,000 and aggregate accrued interest of \$16,751 into an aggregate of 137,006 shares of common stock at conversion prices ranging from \$1.94 to \$3.00 per share.

During the year ended December 31, 2016, the Company and certain lenders agreed to exchange certain convertible notes with an aggregate principal balance of \$235,000, along with accrued and unpaid interest of \$9,788, for an aggregate of 143,102 shares of common stock at prices ranging from \$1.50 to \$2.10 per share. The common stock had an aggregate issuance date value of \$298,762 and, as a result, the Company recorded a loss on extinguishment of \$53,974.

During the years ended December 31, 2016 and 2015, the contingently adjustable conversion ratio associated with certain convertible notes was resolved and such notes became convertible during the period. The Company estimated the intrinsic value of the embedded conversion option based upon the difference between the fair value of the underlying common stock at the commitment date of the note transaction and the effective conversion price embedded in the convertible note. During the years ended December 31 2016 and 2015, the Company recognized \$231,708 and \$87,788, respectively, related to the beneficial conversion feature as debt discount which was immediately amortized.

As of December 31, 2016, the outstanding convertible notes have maturity dates ranging from February 2017 to August 2017 and predominantly bear interest at a rate of 10% per annum payable at maturity.

See Note 10 – Stockholders' Deficiency – Warrant and Option Valuation and Note 10 – Stockholders' Deficiency – Stock Warrants regarding details for the valuation of warrants and the Black-Scholes valuation assumptions.

# Other Notes

# Issuances

During the year ended December 31, 2015, the Company issued other notes payable with an aggregate principal amount of \$478,018 for aggregate cash consideration of \$400,015, including the issuance of a note payable in the principal amount of \$75,000 for a short-term advance from a related party in the amount of \$65,000. The notes issued had maturity dates between October 2015 and December 2015, bore no interest and the \$78,003 difference between the aggregate principal amount of the notes and the cash received was recorded as debt discount and was amortized to interest expense over the term of the notes.

During the year ended December 31, 2016, the Company issued other notes payable with an aggregate principal amount of \$724,500 for aggregate cash consideration of \$674,000. The notes issued have maturity dates ranging from September 2016 to April 2017, interest rates ranging from bearing no interest to 10% per annum, payable at maturity, and the \$58,000 difference between the principal amount of the notes and the cash received was recorded as debt discount and is being amortized to interest expense over the term of notes. In connection with the issuance of the notes, the Company issued five-year, immediately vested warrants to purchase an aggregate of 39,000 shares of common stock at an exercise price of \$4.00 per share. The aggregate \$61,767 relative fair value of the warrants has been recorded as debt discount and is being amortized over the term of the notes.

# **Notes to Consolidated Financial Statements**

#### Note 7 – Notes Payable – Continued

Other Notes - Continued

Exchanges and Other

During the year ended December 31, 2015, the Company and certain lenders agreed to exchange certain other notes with an aggregate principal balance of \$877,873, along with accrued and unpaid interest of \$82,701, for an aggregate of 188,632 shares of common stock and five-year warrants to purchase an aggregate of 111,358 shares of common stock at exercises ranging from \$4.00 to \$15.00 per share. The stock and warrants had an aggregate issuance date value of \$982,112 and, as a result, the Company recorded a loss on extinguishment of \$21,537.

During the year ended December 31, 2015, the Company extended certain other notes payable in the aggregate principal amount of \$735,081 from maturity dates ranging from October 2015 to December 2015 to new maturity dates ranging from December 2015 to October 2016. In connection with the extension of other notes, the Company issued the lenders an aggregate of 10,000 shares of common stock and five-year warrants to purchase an aggregate of 37,500 shares of common stock at an exercise prices of \$4.00 per share. The aggregate grant date fair value of the shares and warrants of \$88,875 has been recorded as debt discount and was amortized over the terms of the notes. Additionally, in connection with a certain other note extension, the Company reduced the exercise price of warrants held by a certain lender to purchase an aggregate of 35,215 shares of common stock from \$10.00 per share to \$4.00 per share. In connection with the warrant modifications, the Company recognized \$10,234 of deferred debt discount which was amortized over the term of the extended note.

During the year ended December 31, 2015, the Company repaid an aggregate principal balance of \$5,000 related to certain other notes.

During the year ended December 31, 2015, the Company and a lender agreed that a certain other note payable held by the lender in the principal amount of \$5,000 was to be extinguished in connection with the terms of a settlement agreement. See Note 9 – Commitments and Contingencies – Litigation for additional details.

During the year ended December 31, 2016, the Company and certain lenders agreed to exchange certain other notes with an aggregate principal balance of \$49,018 for an aggregate of 23,925 shares of common stock at prices ranging from \$1.25 to \$2.45 per share. The common stock had an aggregate issuance date value of \$53,831 and, as a result, the Company recorded a loss on extinguishment of \$4,813.

During the year ended December 31, 2016, the Company and a lender agreed to multiple extensions of the maturity date of a non-interest bearing note payable in the original principal amount of \$244,000 from February 5, 2016 to July 15, 2016. In connection with the extensions, the Company (i) paid the lender an aggregate of \$111,000 of which \$96,000 was repayment of the principal balance and \$15,000 was a fee related to the extension which is reflected within interest expense in the consolidated statements of operations, (ii) the lender received 6,000 shares of common stock with a fair value of \$13,500 which was recorded as debt discount and amortized over the term of the extension and (iii) the Company and the lender agreed to exchange principal in the amount of \$10,000 into 8,000 shares of common stock (included within the exchanges discussed above). On July 15, 2016, the Company repaid the \$138,000 outstanding principal balance.

During the year ended December 31, 2016, excluding amounts extended as discussed above, the Company extended notes payable with an aggregate principal balance of \$567,063 from maturity dates within October 2015 to new maturity dates ranging from August 2016 to October 2017. In connection with one of the notes extended, the Company issued a five-year, immediately vested warrant to purchase 30,000 shares at an exercise price of \$4.00 per share. The \$52,800 relative fair value of the warrant has been recorded as debt discount and is being amortized over the term of the note. Additionally, outstanding warrants to purchase an aggregate of 60,215 shares of common stock with an exercise price of \$4.00 and expiration dates ranging from June 2017 to December 2020 had their expiration dates extended to October 2021. In connection with the warrant modifications, the Company recognized \$13,120 of deferred debt discount which is being amortized over the term of the extended note.

During the year ended December 31, 2016, excluding amounts repaid as discussed above, the Company repaid an aggregate principal amount of \$92,500 of notes payable.

# **Notes to Consolidated Financial Statements**

# Note 7 - Notes Payable - Continued

Other Notes - Continued

Exchanges and Other - Continued

As of December 31, 2016, the outstanding other notes have maturity dates ranging from past due to October 1, 2017 and bear interest at rates ranging from 0% to 15% payable at maturity. The holder of one of the notes is entitled to five years of royalty payments associated with cosmetic revenues, as defined in the note, ranging from 2.0% to 4.0% of cosmetic revenues, depending on the year the cosmetic revenues are earned. Given that the Company has not yet generated any cosmetic revenues, no royalty payments have been earned.

See Note 10 – Stockholders' Deficiency – Warrant and Option Valuation and Note 10 – Stockholders' Deficiency – Stock Warrants regarding details for the valuation of warrants and the Black-Scholes valuation assumptions.

# Note 8 - Income Taxes

United States and foreign components of loss before income taxes were as follows:

	For The Years Ended December 31,				
	2016		2015		
United States	\$ (8,627,380)	\$	(7,767,924)		
Foreign	(8,912)		(155,556)		
Loss before income taxes	\$ (8,636,292)	\$	(7,923,480)		

The tax effects of temporary differences that give rise to deferred tax assets and liabilities are presented below:

		For The Years Ended December 31,			
		2016			2015
Deferred Tax Assets:					
Net operating loss carryforward		\$	3,495,000	\$	1,181,900
Stock-based compensation			2,868,000		1,976,600
Accruals			237,000		231,100
Research & development tax credits			192,000		139,480
Other			2,000		2,100
Gross deferred tax assets			6,794,000		3,531,180
Deferred Tax Liabilities:					
Fixed assets			(97,000)		(110,300)
Intangible assets			(18,000)		(13,400)
Gross deferred tax liabilities			(115,000)		(123,700)
Net deferred tax assets			6,679,000		3,407,480
Valuation allowance			(6,679,000)		(3,407,480)
Deferred tax asset, net of valuation allowance		\$	-	\$	-
Changes in valuation allowance		\$	3,271,520	\$	(2,922,620)
	F 21				

# **Notes to Consolidated Financial Statements**

# Note 8 - Income Taxes - Continued

The income tax provision (benefit) consists of the following:

		For The Years Ended December 31,				
	·	2016	2015			
Federal:						
Current	\$	-	\$ -			
Deferred		(2,927,149)	2,614,976			
State and local:						
Current		-	-			
Deferred		(344,371)	307,644			
	' <u>'</u>	(3,271,520)	2,922,620			
Change in valuation allowance		3,271,520	(2,922,620)			
Income tax provision (benefit)	\$	-	\$ -			

A reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

	For The Years English December 31	
	2016	2015
Tax benefit at federal statutory rate	(34.0)%	(34.0)%
State income taxes, net of federal benefit	(4.0)%	(4.0)%
Permanent differences	0.4%	0.8%
Research & development tax credits	(0.6)%	(0.6)%
Impact of Section 382 limit	0.0%	76.0%
True-ups and other	0.3%	(0.6)%
Change in valuation allowance	37.9%	(37.6)%
Effective income tax rate	0.0%	0.0%

The Company assesses the likelihood that deferred tax assets will be realized. To the extent that realization is not likely, a valuation allowance is established. Based upon the Company's history of losses since inception, management believes that it is more likely than not that future benefits of deferred tax assets will not be realized.

At December 31, 2016 and 2015, the Company had approximately \$9,200,000 and \$3,100,000, respectively, of federal net operating losses that may be available to offset future taxable income. State net operating losses are not materially different from the federal net operating losses. The net operating loss carry forwards, if not utilized, will expire from 2029 to 2036 for federal purposes. In accordance with Section 382 of the Internal Revenue Code, the usage of the Company's net operating loss carry forwards are subject to annual limitations due to greater than 50% ownership changes. The Section 382 limitations that became effective on or about August 2015 and July 2014 have resulted in (a) approximately \$15,500,000 and \$5,700,000, respectively, of federal NOLs not being realizable; and (b) the reversal of approximately \$5,900,000 and \$2,200,000, respectively, of net operating loss deferred tax assets.

The Company files income tax returns in the U.S. federal jurisdiction and the state of New York (also formerly Florida), which remain subject to examination by the various taxing authorities beginning with the tax year ended December 31, 2013.

# **Notes to Consolidated Financial Statements**

# Note 9 - Commitments and Contingencies

# Operating Lease

The Company is a party to a lease for 6,800 square feet of space located in Melville, New York (the "Melville Lease") with respect to its corporate and laboratory operations. The Melville Lease expires in March 2020 (subject to extension at the option of the Company for a period of five years) and calls for an annual base rental during the initial term ranging between \$132,600 and \$149,260. The aggregate base rent payable over the lease term will be recognized on a straight-line basis. In connection with the operating lease, the Company paid the landlord a security deposit of \$45,900, which is reflected on the consolidated balance sheet as of December 31, 2016 and 2015.

During the year ended December 31, 2016, the Company received a credit of \$20,912 towards its 2016 rent payments in connection with a tax rebate received by the landlord. The Company's rent expense amounted to \$124,038 and \$141,131 for the years ended December 31, 2016 and 2015, respectively. Rent expense is reflected in general and administrative expenses and research and development expenses in the consolidated statement of operations.

Future minimum payments under this operating lease agreement is as follows:

# For the Years Ending,

December 31,	Amount	
2017	\$	127,948
2018		131,778
2019		148,172
2020		37,315
	\$	445,213

# Litigations, Claims and Assessments

In the normal course of business, the Company may be involved in legal proceedings, claims and assessments arising in the ordinary course of business.

In April 2015, the Company and an alleged former consultant entered into a settlement agreement regarding an action commenced against the Company in the Circuit Court of Palm Beach County, Florida by the plaintiff. In connection with the settlement agreement, during the year ended December 31, 2015, in addition to certain cash payment obligations, the Company issued the plaintiff 4,230 shares of common stock and five-year, immediately vested warrants to purchase an aggregate of 30,000 shares of common stock at exercise prices ranging from \$7.60 to \$12.00 per share in full satisfaction of the claims. The aggregate value of the issuances of \$152,000 was recognized immediately.

The Company records legal costs associated with loss contingencies as incurred and accrues for all probable and estimable settlements.

# Research Agreements

In June 2015, a research agreement entered into in June 2012 between the Company and the research foundation of a state university expired. During the year ended December 31, 2015, the Company recorded research and development expense of approximately \$103,000 in connection with the research agreement. As of December 31, 2016, the Company had accrued approximately \$112,000, in connection with the research agreement, which is included in accrued expenses and other current liabilities in the consolidated balance sheets.

# **Notes to Consolidated Financial Statements**

#### Note 9 - Commitments and Contingencies - Continued

# Consulting Agreements

Business Advisory Services

In August 2015, a February 2011 agreement for business advisory services that had expired on June 30, 2015 was further amended. Pursuant to the amendment, the agreement was reinstated effective as of July 1, 2015 and provided for an expiration date of June 30, 2016 (the "New Business Advisory Extended Term"). In June 2016, the agreement was further amended and the agreement was reinstated effective as of July 1, 2016 and provided for an expiration date of December 31, 2016 (the "New Business Advisory Extended Term"). In consideration of services rendered during the New Business Advisory Extended Term, the Company agreed to pay a cash fee of \$15,000 per month and the Company granted an immediately vested five-year warrant to purchase 10,000 shares of common stock at an exercise price of \$12.00 per share and an immediately vested five-year warrant to purchase 10,000 shares of common stock at an exercise price of \$10.00 per share and of the warrants of \$74,923 was recognized immediately. During each of the years ended December 31, 2016 and 2015, the Company recorded cash consulting fee expense of \$180,000 related to the business advisory agreement.

See Note 10 – Stockholders' Deficiency – Warrant and Option Valuation and Note 10 – Stockholders' Deficiency – Stock Warrants regarding details for the valuation of warrants and the Black-Scholes valuation assumptions.

# **Employment Agreements**

# Chief Executive Officer

In March 2015, the Company and its Chief Executive Officer ("CEO") agreed to extend the term of his employment agreement to December 31, 2017. Pursuant to the employment agreement, the CEO is entitled to receive a salary of \$400,000 per annum and, effective January 1, 2015, the CEO's annual car allowance was reduced to \$7,200 from \$14,400. Pursuant to the employment agreement, the CEO was entitled to receive an annual bonus for 2015 equal to 50% of his annual base salary and is entitled to receive an annual bonus for each of 2016 and 2017 of up to 50% of his annual base salary in the event certain performance goals, as determined by the Compensation Committee of the Board of Directors of the Company(the "Compensation Committee"), are satisfied. In February 2017, the Compensation Committee and the CEO agreed to amend the CEO's 2016 annual bonus such that (i) the total bonus that could be earned would be equal to 40% of the CEO's 2016 annual salary and (ii) the CEO would have until July 31, 2017 to satisfy certain performance goals related to his 2016 bonus. Pursuant to the employment agreement, in the event that (a) the CEO's employment is terminated by the Company without cause, or (b) the CEO terminates his employment for "good reason" (each as defined in the employment agreement), or (c) the term of the CEO's employment agreement is not extended beyond December 31, 2017 and, within three months of such expiration date, his employment is terminated by the Company without "cause" or the CEO terminates his employment for any reason, the CEO would be entitled to receive severance in an amount equal to his then annual base salary and certain benefits, plus \$100,000 (in lieu of bonus). Further, in the event that the CEO's employment is terminated by the Company without cause, or the CEO terminates his employment for "good reason", following a "change in control" (as defined in the employment agreement), the CEO would be entitled to receive severance in an amount equal to one and one-half times his then annual base salary and certain benefits, plus \$300,000 (in lieu of bonus). During each of the years ended December 31, 2016 and 2015, the Company recorded \$407,200 in operating expenses with regard to the CEO's base salary and car allowance. As of December 31, 2016 and 2015, the accrued and unpaid compensation (salary, bonus, tax liability, car allowance and vacation pay) for the CEO was \$602,221 and \$797,576, respectively, and was included in accrued expenses and other current liabilities in the consolidated balance sheets. As of December 31, 2016, the Company has accrued \$96,000 and \$49,691 for CEO bonus payments which have been achieved or are probable to be achieved over the service period, respectively.

# **Notes to Consolidated Financial Statements**

#### Note 9 - Commitments and Contingencies - Continued

Employment Agreements - Continued

Other

During the year ended December 31, 2016, the Company's Compensation Committee and Board of Directors approved performance-based cash bonuses for the year ended December 31, 2016 for the Company's officers and certain employees in the aggregate amount of up to \$225,750, excluding amounts earnable by the Company's CEO. In March 2017, the Company's Board of Directors approved amendments of the performance-based cash bonuses for the year ended December 31, 2016 for the Company's officers (other than the CEO, as discussed above) and certain current employees such that (i) an aggregate of up to \$162,000, excluding amounts earnable by the Company's CEO, could be earned pursuant to the satisfaction of certain 2016 performance goals and (ii) the Company's officers and certain employees would have until July 31, 2017 to satisfy certain performance goals related to cash bonuses for the year ended December 31, 2016. As of December 31, 2016, excluding amounts due to the Company's CEO as discussed above, the Company has accrued \$95,041 and \$50,531 for bonus payments which have been achieved or are probable to be achieved over the service period, respectively.

In February 2015, the Company hired a President for its Disc/Spine Division ("Division President") pursuant to an at-will employment agreement which entitles him to a specified salary and bonus. In the event the Company terminates the Division President's employment without cause, the Division President is entitled to cash severance payments equal to one-half of his then annual base salary (such one-half amount is currently \$150,000) paid over nine months. As additional compensation, the Company granted the Division President a ten-year option to purchase 25,000 shares of common stock at an exercise price of \$9.20 per share, pursuant to the Plan. The options vests over three years on the grant date anniversaries. The grant date value of \$200,400 is being recognized proportionate to the vesting period.

In March 2015, the Company agreed to amend the at-will employment agreement with its Vice President of Research and Development ("VP of R&D"). Pursuant to the employment agreement, as amended, in the event that the VP of R&D's employment with the Company is terminated without cause, the VP of R&D would be entitled to receive a cash severance payment equal to one-half of his base annual salary (such one-half amount is currently \$125,000).

As of December 31, 2016, two other employees have "at-will" employment agreements with the Company that provide for aggregate cash severance payments of \$175,000, payable over twelve months, upon involuntary termination.

# Board of Directors

As of December 31, 2016, and 2015, \$357,500 and \$200,000, respectively, of director cash compensation was outstanding and included in accrued expenses and other current liabilities in the consolidated balance sheets.

# Related Party Agreement

In March 2015, a 2014 agreement, as amended, between the Company and an affiliate of one of its then directors for consulting services related to the Company's brtxDISC Program and ThermoStem Program expired. Pursuant to the aggreement, the Company issued 1,725 shares of common stock to one of its then directors. The common stock had a grant date fair value of \$15,000 which was recognized immediately and is reflected within consulting expenses within the Company's consolidated statement of operations.

# Note 10 - Stockholders' Deficiency

# **Authorized Capital**

In December 2014, the Company's stockholders approved the reincorporation of the Company from the State of Nevada to the State of Delaware effective January 1, 2015 and in connection therewith (i) approved an amendment to the Company's Articles of Incorporation to increase the number of shares of common stock authorized to be issued by the Company from 100,000,000 to 200,000,000; and (ii) approved an amendment to the Company's Articles of Incorporation to increase the number of shares of preferred stock authorized to be issued by the Company from 1,000,000 to 5,000,000.

Effective July 7, 2015, pursuant to authority granted by the stockholders of the Company, the Company implemented a 1-for-20 reverse split of the Company's issued and outstanding common stock and a reduction in the number of shares of common stock authorized to be issued by the Company from 200,000,000 to 30,000,000.

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

# Authorized Capital - Continued

As of December 31, 2016, the Company was authorized to issue 30,000,000 shares of common stock, \$0.001 par value, and 5,000,000 shares of preferred stock, \$0.01 par value. The holders of the Company's common stock are entitled to one vote per share. Subject to the rights of holders of preferred stock, if any, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of legally available funds. Subject to the rights of holders of preferred stock, if any, upon liquidation, dissolution or winding up of the Company, holders of common stock are entitled to share ratably in all assets of the Company that are legally available for distribution.

# 2010 Equity Participation Plan

In September 2015, the Compensation Committee increased the number of shares authorized to be issued pursuant to the Plan from 1,000,000 to 2,000,000, subject to stockholder approval. In November 2015, the Compensation Committee further increased the number of shares authorized to be issued pursuant to the Plan to 2,250,000, subject to stockholder approval. In December 2015, the Company's stockholders approved an increase in the number of shares of common stock authorized to be issued pursuant to the Plan to 2,250,000.

In August 2016 and October 2016, the Compensation Committee and the Company's stockholders, respectively, approved an increase in the number of shares authorized to be issued pursuant to the Company's 2010 Equity Participation Plan from 2,250,000 to 4,250,000.

# Common Stock and Warrant Offerings

During the year ended December 31, 2015, the Company issued an aggregate of 395,425 shares of common stock at prices ranging from \$4.00 to \$7.00 per share to investors for aggregate gross proceeds of \$2,033,700 (of such aggregate issuances, 50,000 shares of common stock were issued to the Bermuda Lender for an aggregate gross proceeds of \$300,000). In connection with the purchases, the Company issued five-year warrants to purchase an aggregate of 259,464 shares of common stock at exercise prices ranging from \$5.00 to \$15.00 per share of common stock (of such aggregate warrant issuances, the Bermuda Lender was issued a five-year warrant to purchase 12,500 shares of common stock at an exercise price of \$15.00 per share with a grant date value of \$40,000). The warrants had an aggregate grant date value of \$611,730. In connection with the purchase of 125,000 shares of common stock (the "Shares") and a warrant to purchase 125,000 shares of common stock at an exercise price of \$5.00 per share (the "Warrant") for gross proceeds of \$500,000, the Company agreed to cause the appointment and election of the investor to its Board of Directors. In December 2015, the investor was elected as a director of the Company.

During the year ended December 31, 2016, the Company issued an aggregate of 956,883 shares of common stock and warrants to purchase an aggregate of 1,801,177 shares of common stock at exercise prices ranging from \$4.00 to \$5.00 per share to investors for aggregate gross proceeds of \$3,498,338. Of the aggregate warrants issued, warrants to purchase 444,444, 400,000 and 956,733 shares of common stock had terms of 0.7, 1.0 and 5.0 years, respectively. The warrants had an aggregate grant date fair value of \$2,054,144.

# Warrant and Option Valuation

The Company has computed the fair value of warrants and options granted using the Black-Scholes option pricing model. Option forfeitures are estimated at the time of valuation and reduce expense ratably over the vesting period. This estimate will be adjusted periodically based on the extent to which actual option forfeitures differ, or are expected to differ, from the previous estimate, when it is material. The Company estimated forfeitures related to option grants at an annual rate ranging from 0% to 5% for options granted during the years ended December 31, 2016 and 2015. The expected term used for warrants and options issued to non-employees is the contractual life and the expected term used for options issued to employees and directors is the estimated period of time that options granted are expected to be outstanding. The Company utilizes the "simplified" method to develop an estimate of the expected term of "plain vanilla" employee option grants. The Company is utilizing an expected volatility figure based on a review of the historical volatilities, over a period of time, equivalent to the expected life of the instrument being valued, of similarly positioned public companies within its industry. The risk-free interest rate was determined from the implied yields from U.S. Treasury zero-coupon bonds with a remaining term consistent with the expected term of the instrument being valued.

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

# Warrant Exercises

During the year ended December 31, 2015, warrants to purchase an aggregate of 75,473 shares of common stock were exercised at a reduced exercise price of \$3.50 per share (reduced from exercises prices ranging from \$4.00 to \$15.00 per share) for aggregate gross proceeds of \$264,144. The Company recognized a warrant modification charge of \$20,295 during the year ended December 31, 2015 which represents the incremental value of the modified warrant as compared to the original warrant, both valued as of the respective modification dates.

During the year ended December 31, 2016, warrants to purchase an aggregate of 60,831 shares of common stock were exercised at a reduced exercise price of \$3.50 per share (reduced from exercises prices ranging from \$4.00 to \$15.00 per share) for aggregate gross proceeds of \$212,898. The Company recognized a warrant modification charge of \$23,448 during the year ended December 31, 2016, which represents the incremental value of the modified warrants as compared to the original warrants, both valued as of the respective modification dates.

For the Years Ended

# Stock Warrants

In applying the Black-Scholes option pricing model to warrants granted, the Company used the following assumptions:

	December 31,			
	2016	2015		
Risk free interest rate	0.44% - 2.07%	1.29% - 1.75%		
Expected term (years)	0.67 - 5.00	5.00		
Expected volatility	124% - 152%	120% - 122%		
Expected dividends	0.00%	0.00%		

The weighted average estimated fair value of the warrants granted during the years ended December 31, 2016 and 2015 was approximately \$1.18 and \$2.72 per share, respectively.

See Note 7 – Notes Payable for details associated with the issuance of warrants in connection with note issuances and the exchange of notes payable. See Note 9 – Commitments and Contingencies – Consulting Agreements for details associated with the issuance of warrants as compensation. See Note 10 – Stockholders' Deficiency – Common Stock and Warrant Offerings for details associated with the issuance of warrants in connection with common stock and warrant offerings.

During the year ended December 31, 2015, the Company extended the expiration date of previously outstanding warrants to purchase an aggregate of 47,939 shares of common stock from expiration dates ranging from December 31, 2015 to January 23, 2016 to new expiration dates ranging from December 31, 2016 to December 31, 2017 and reduced the exercise price of previously outstanding warrants to purchase an aggregate of 470,085 shares of common stock from exercise prices ranging from \$6.00 to \$20.00 per share to new exercise prices ranging from \$4.00 to \$10.00 per share. During year ended December 31, 2015, the Company recognized \$77,905 of incremental expense related to the modification of the warrants which is reflected in warrant modification expense in the consolidated statements of operations.

During the year ended December 31, 2016, the Company issued an immediately vested five-year warrant to purchase 40,000 shares of common stock at an exercise price of \$4.00 per share to a consultant for services rendered. The issuance date fair value of \$62,908 was immediately recognized as stock-based compensation expense which is reflected in consulting expense in the consolidated statements of operations.

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

# Stock Warrants - Continued

During the year ended December 31, 2016, the Company reduced the exercise price of previously outstanding warrants to purchase an aggregate of 44,166 shares of common stock from exercise prices ranging from \$6.00 to \$15.00 per share to a new exercise price of \$4.00 per share and recognized \$5,038 of incremental expense related to the modification of the warrants which is reflected in warrant modification expense in the consolidated statements of operations.

The Company recorded stock—based compensation expense of \$62,908 and \$99,501 during the years ended December 31, 2016 and 2015, respectively, related to stock warrants issued as compensation, which is reflected as consulting expense in the consolidated statements of operations. As of December 31, 2016, there was no unrecognized stock-based compensation expense related to stock warrants.

A summary of the warrant activity during the year ended December 31, 2016 is presented below:

	Number of Warrants	Weighted Average Exercise Price	Weighted Average Remaining Life In Years	Aggregate Intrinsic Value
Outstanding, December 31, 2015	1,066,930	\$ 7.56[1]		
Issued	1,991,927	4.64		
Exercised	(60,831)	3.50[2]		
Forfeited	(44,375)	4.00		
Outstanding, December 31, 2016	2,953,651	\$ 5.40[1]	3.3	\$ -
Exercisable, December 31, 2016	2,918,651	\$ 5.40	3.4	\$ -

- [1] Excludes the impact of a warrant to purchase 35,000 shares of common stock that has an exercise price which is the greater of \$30.00 per share or the fair market value of the common stock on the date certain performance criteria are met. Exercisability is subject to satisfaction of certain performance criteria which did not occur during the year ended December 31, 2016.
- [2] During the year ended December 31, 2016, warrants to purchase an aggregate of 60,831 shares of common stock were exercised at a reduced exercise price of \$3.50 per share (reduced from exercise prices ranging from \$4.00 to \$15.00 per share) for aggregate gross proceeds of \$212,898. The Company recognized a warrant modification charge of \$23,448 during the year ended December 31, 2016, which represents the incremental value of the modified warrants as compared to the original warrants, both valued as of the respective modification dates. See Note 10 Stockholders' Deficiency Warrant Exercises for additional details.

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

Stock Warrants - Continued

The following table presents information related to stock warrants at December 31, 2016:

Warrants Ou	ıtstanding	Warrants	arrants Exercisable		
Exercise Price	Outstanding Number of Warrants	Weighted Average Remaining Life In Years	Exercisable Number of Warrants		
\$4.00 - \$4.99	1,554,245	3.4	1,554,245		
\$5.00 - \$5.99	1,169,243	3.4	1,169,243		
\$6.00 - \$7.99	40,000	3.6	40,000		
\$8.00 - \$9.99	2,500	2.9	2,500		
\$10.00 - \$14.99	55,446	3.3	55,446		
\$15.00 - \$19.99	38,559	2.9	38,559		
\$20.00 - \$80.00	58,658	0.7	58,658		
Variable[1]	35,000	-	-		
	2,953,651	3.4	2,918,651		

<sup>[1]</sup> A warrant to purchase 35,000 shares of common stock has an exercise price which is the greater of \$30.00 per share or the fair market value of the common stock on the date certain performance criteria are met. Exercisability is subject to satisfaction of certain performance criteria which did not occur during the year ended December 31, 2016.

# Stock Options

In applying the Black-Scholes option pricing model to stock options granted, the Company used the following assumptions:

		For the Year Ended December 31,		
	2016	2015		
Risk free interest rate	1.16% - 1.53%	1.33% - 2.24%		
Expected term (years)	5.50 - 10.00	5.00 - 10.00		
Expected volatility	124% - 126%	120% - 123%		
Expected dividends	0.00%	0.00%		

The weighted average estimated fair value of the stock options granted during the years ended December 31, 2016 and 2015 was approximately \$3.24 and \$4.07 per share, respectively.

See Note 9 – Commitments and Contingencies for details associated with certain grants of options as compensation to employees, directors and consultants.

In September 2015, the Compensation Committee determined that, with respect to all outstanding options granted under the Plan, to the extent not already provided for in the stock option agreement evidencing the option grant, the optionee be given the right to exercise the option on a cashless basis as contemplated by Section 13(b) of the Plan and, other than in the case of the Company's CEO, in the event of a termination of employment, directorship, consultancy or membership on the Company's Scientific Advisory Board, to the extent that the options are then exercisable, they shall remain exercisable until twelve months following such termination (unless the stock option agreement evidencing the option grant provides that such options are exercisable until the expiration date of the options), but in no event shall the options be exercisable after the respective expiration dates of the options.

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

# Stock Options - Continued

In February 2016, the Company granted a ten-year option to a director to purchase 15,000 shares of the Company's common stock at an exercise price of \$3.70. The shares vest ratably over three years on the issuance date anniversaries. The options had an aggregate grant date value of \$52,900.

In June 2016, the Company issued ten-year options to employees, directors and advisors to purchase an aggregate of 827,000 shares of common stock at an exercise price of \$3.73 per share, pursuant to the Plan. The shares vest as follows: (i) 192,333 shares vest immediately, (ii) 384,667 shares vest ratably over two years on the issuance date anniversaries and (iii) 250,000 shares vest ratably over three years on the issuance date anniversaries. The options had an aggregate grant date value of \$2,682,800.

In August 2016, the Company granted a ten-year option to the Chairman of the Company's Scientific Advisory Board, to purchase 15,000 shares of the Company's common stock at an exercise price of \$3.10. The shares vest ratably over two years on the issuance date anniversaries. The option had a grant date fair value of \$41,000 and will be amortized over the vesting period of the option.

The following table presents information related to stock option expense:

	 For the Year Ended December 31,			Unrecognized at December 31,	Weighted Average Remaining Amortization Period	
	2016		2015	 2016	(Years)	
Consulting	\$ 880,288	\$	595,446	\$ 902,142	1.4	
Research and development	492,061		376,596	902,056	2.0	
General and administrative	 1,001,445		705,546	1,068,001	1.5	
	\$ 2,373,794	\$	1,677,588	\$ 2,872,199	1.6	
		F	7-30			

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

Stock Options - Continued

A summary of the option activity during the year ended December 31, 2016 is presented below:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Life In Years	Aggregate Intrinsic Value
Outstanding, December 31, 2015	1,330,450	\$ 10.11		
Granted	857,000	3.72		
Forfeited	(18,500)	16.41		
Outstanding, December 31, 2016	2,168,950	\$ 7.53	8.2	\$ 3,000
Exercisable, December 31, 2016	1,137,620	\$ 9.78	7.6	\$ <u>-</u>

The following table presents information related to stock options at December 31, 2016:

Options Outstanding		Options Exercisable				
Exercise Price	Outstanding Number of Options	Weighted Average Remaining Life In Years	Exercisable Number of Options			
\$3.10 - \$3.99	857,000	9.4	192,336			
\$4.00 - \$4.99	15,000	8.9	5,000			
\$5.00 - \$5.99	35,000	7.5	35,000			
\$6.00 - \$6.99	318,750	7.3	213,749			
\$7.00 - \$7.99	507,000	8.6	305,501			
\$8.00 - \$8.99	32,250	8.5	10,750			
\$9.00 - \$9.99	30,000	6.2	13,334			
\$10.00 - \$19.99	198,000	6.5	193,000			
\$20.00 - \$30.00	175,950	5.1	168,950			
	2,168,950	7.6	1,137,620			

# Compensatory Common Stock Issuances

See Note 9 - Commitments and Contingencies for details associated with certain issuances of common stock as compensation to employees, directors and consultants.

During the year ended December 31, 2015, the Company issued an aggregate of 31,473 shares of immediately vested common stock valued at \$112,847 to consultants pursuant to consulting agreements for services rendered during the period.

During the year ended December 31, 2015, the Company issued 943 shares of common stock valued at \$8,481 in satisfaction of previously accrued professional service fees.

During the year ended December 31, 2016, the Company issued an aggregate of 54,901 shares of immediately vested common stock valued at \$116,958 to consultants pursuant to consulting agreements for services rendered during the period.

# **Notes to Consolidated Financial Statements**

# Note 10 - Stockholders' Deficiency - Continued

# Compensatory Common Stock Issuances - Continued

During the year ended December 31, 2016, the Company issued an aggregate of 13,208 shares of common stock valued at \$27,553 in satisfaction of previously accrued consulting services.

The following table presents information related to compensatory common stock expense:

	 For The Nine Months Ended December 31,			Unrecognized at December 31,	
	2016		2015		2016
Consulting	\$ 100,083	\$	168,800	\$	-
Research and development	 		8,847		-
	\$ 100,083	\$	177,647	\$	-

# Return of Shares to Treasury

In June 2016, the Company and a consultant agreed that, due to the amount and nature of the services performed, the consultant would return 7,500 shares of common stock to the Company with a fair value of \$16,875. Accordingly, the Company recorded the treasury shares at cost with a stock-based compensation credit which is reflected within consulting expense in the consolidated statements of operations.

# Retirement of Treasury Shares

In August 2016, the Company's Board of Directors made a determination to retire 35,432 shares of treasury stock.

# Note 11 - Subsequent Events

# **Consulting Agreements**

On March 9, 2017, in consideration of the extension of the term of a consulting agreement, the Company issued to the consultant an immediately vested five-year warrant for the purchase of 25,000 shares of common stock of the Company at an exercise price of \$4.00 per share. Concurrently, the Company entered into an exchange agreement with the consultant pursuant to which \$30,000 of accrued consulting fees were exchanged for 10,000 shares of common stock of the Company and, in consideration thereof, the Company issued to the consultant an immediately vested five-year warrant for the purchase of 10,000 shares of common stock of the Company at an exercise price of \$4.00 per share.

Effective March 1, 2017, the Company entered into an exchange agreement with the Chairman of the Company's Scientific Advisory Board, pursuant to which an aggregate of \$175,000 of accrued consulting fees were exchanged for 58,334 shares of common stock of the Company and, in consideration thereof, the Company issued to such person an immediately vested five-year warrant for the purchase of 58,334 shares of common stock of the Company at an exercise price of \$4.00 per share.

# Director Fees

Effective March 1, 2017, the Company entered into exchange agreements with four non-employee directors of the Company, pursuant to which an aggregate of \$265,000 of accrued director fees were exchanged for an aggregate of 88,334 shares of common stock of the Company and, in consideration thereof, the Company issued to the directors immediately vested five-year warrants for the purchase of an aggregate of 88,334 shares of common stock of the Company at an exercise price of \$4.00 per share.

# **Employment Agreements**

In February 2017 and March 2017, the Company's Compensation Committee and Board of Directors, respectively, approved performance milestones for the performance-based cash bonuses payable for the year ending December 31, 2017 for certain of the Company's officers and certain current employees such that an aggregate of up to \$402,500 could be earned for such year pursuant to the satisfaction of such goals.

# **Notes to Consolidated Financial Statements**

#### Note 11 - Subsequent Events - Continued

# Common Stock and Warrant Offerings

Subsequent to December 31, 2016, the Company issued an aggregate of 256,668 shares of common stock and five-year immediately vested warrants to purchase an aggregate of 266,668 shares of common stock at an exercise price of \$4.00 to investors for aggregate gross proceeds of \$770,000.

# Stock Warrants

Subsequent to December 31, 2016, with respect to a warrant held by an investor, the Company agreed that (i) the conditions to the exercisability of the warrant for tranches to purchase an aggregate of 35,000 shares were eliminated, such that the entire warrant to purchase 50,000 shares of common stock was exercisable, and (ii) the exercise price of the warrant was reduced from an exercise price of \$30.00 per share to \$3.50 per share. Concurrent with the modification of the warrant, the investor exercised the warrant in full for aggregate gross proceeds to the Company of \$175,000.

# Stock Options

On February 14, 2017, the Compensation Committee reduced the exercise price of outstanding options for the purchase of an aggregate of 1,219,450 shares of common stock of the Company (with exercise prices ranging between \$5.70 and \$30.00 per share) to \$4.70 per share, which was the closing price for the Company's common stock on February 13, 2017, as reported by the OTCQB. The exercise price reduction related to options held by, among others, the Company's executive officers and directors.

# Short-Term Advances

Subsequent to December 31, 2016, the Company received non-interest bearing advances in the amount of \$30,015 from an officer of the Company and repaid an aggregate of \$45,015 of non-interest bearing advances from a director of the Company and an officer of the Company.

# Notes Payable

On January 3, 2017, the Company issued a lender a six-month note payable in the principal amount of \$242,000, which bears no interest, for cash proceeds of \$200,000. The \$42,000 difference was recorded as a debt discount and will be amortized over the term of the note. In connection with the issuance of this promissory note, the Company issued the lender an immediately vested five-year warrant to purchase 20,000 shares of common stock an exercise price of \$4.00 per share.

Subsequent to December 31, 2016, the Company and certain lenders agreed to exchange certain notes payable with an aggregate principal balance of \$280,000 and aggregate accrued interest of \$7,402 into an aggregate of 95,802 shares of common stock and immediately vested five-year warrants to purchase an aggregate of 95,802 shares of common stock at an exercise price of \$4.00 per share. In addition, in consideration of the exchange by one lender, the Company agreed to extend the expiration dates of certain warrants held by the lender for the purchase of an aggregate of 18,000 shares of common stock of the Company at an exercise price of \$4.00 per share, from expiration dates ranging from April 27, 2021 to January 31, 2022 to a new expiration date of February 8, 2022.

Subsequent to December 31, 2016, the Company elected to convert certain convertible notes with an aggregate principal balance of \$45,000 and aggregate accrued interest of \$2,277 into an aggregate of 17,854 shares of common stock at conversion prices ranging from \$2.51 to \$2.77 per share.

Subsequent to December 31, 2016, the Company and certain lenders agreed to extend notes payable with an aggregate principal balance of \$322,000 from maturity dates ranging between January 2017 to February 2017 to new maturity dates ranging from March 2017 to April 2017. In connection with one of the extensions, the Company issued the lender a five-year, immediately vested warrant to purchase 3,000 shares of common stock at an exercise price of \$4.00 per share.

Subsequent to December 31, 2016, the Company repaid an aggregate principal amount of \$74,000 of notes payable.

# BIORESTORATIVE THERAPIES, INC. 2010 EQUITY PARTICIPATION PLAN

- 1. <u>Purpose</u>. The BioRestorative Therapies, Inc. 2010 Equity Participation Plan (the "Plan") is intended to advance the interests of BioRestorative Therapies, Inc. (the "Company") by inducing individuals or entities of outstanding ability and potential to join and remain with, or provide consulting or advisory services to, the Company or a parent or subsidiary of the Company, by encouraging and enabling eligible employees, non-employee directors, consultants and advisors to acquire proprietary interests in the Company, and by providing the participating employees, non-employee directors, consultants and advisors with an additional incentive to promote the success of the Company. This is accomplished by providing for the granting of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock and Stock Bonuses, as such terms are defined in Section 2, to employees, non-employee directors, consultants and advisors. As used herein, the term "parent" or "subsidiary" shall mean any present or future entity which is or would be a "parent corporation" or "subsidiary corporation" of the Company as the term is defined in Section 424 of the Code (as hereinafter defined) (determined as if the Company were the employer corporation).
  - 2. **<u>Definitions</u>**. Capitalized terms not otherwise defined in the Plan shall have the following meanings:
- (a) "Award Agreement" shall mean a written agreement, in such form as the Committee shall determine, that evidences the terms and conditions of a Stock Award granted under the Plan.
  - (b) "Board" shall mean the Board of Directors of the Company.
  - (c) "Code" shall mean the Internal Revenue Code of 1986, as amended.
- (d) "Committee" shall mean a committee or subcommittee of the Board to whom authority has been granted by the Board to make determinations with regard to the Plan, which committee or subcommittee shall consist of at least two persons, each of whom is intended to be an "outside independent director" to the extent required by the rules and regulations of any established stock exchange or a national market system, including, without limitation, The Nasdaq Stock Market ("Nasdaq"), and an "outside director" to the extent required by Section 162(m) of the Code. If for any reason the appointed Committee does not meet the requirements of Section 162(m) of the Code, such noncompliance shall not affect the validity of Stock Awards, interpretations or other actions of the Committee.
  - (e) "Common Stock" shall mean the common stock, \$.001 par value, of the Company.
  - (f) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

- (g) "Fair Market Value" on a specified date means the value of a share of Common Stock, determined as follows:
- (i) if the Common Stock is listed on any established stock exchange or a national market system, including, without limitation, Nasdaq, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day immediately preceding the day of determination (or, if the determination is made after the close of business for trading, then on the day of determination) (or, if no closing sales price or closing bid was reported on that date, as applicable, on the last trading date such closing sales price or closing bid was reported), as reported in The Wall Street Journal or such other source as the Committee deems reliable;
- (ii) if the Common Stock is regularly quoted on an automated quotation system (including the OTCQB market) or by a recognized securities dealer, its Fair Market Value shall be the closing sales price for such stock (or the mean between the high bid and low asked prices for the Common Stock, if selling prices are not reported), as quoted on such system or by such securities dealer on the day immediately preceding the day of determination (or, if the determination is made after the close of business for trading, then on the day of determination) (or, if no such prices were reported on that date, as applicable, on the last date such prices were reported), as reported in The Wall Street Journal or such other source as the Committee deems reliable; or
- (iii) in the absence of an established market for the Common Stock, the Fair Market Value shall be determined in good faith by the Committee under a method that complies with Code Sections 422 and 409A, if applicable.
- (h) "Incentive Stock Option" shall mean an Option that is an "incentive stock option" within the meaning of Section 422 of the Code and that is identified as an Incentive Stock Option in the Award Agreement by which it is evidenced.
  - (i) "Nonstatutory Stock Option" shall mean an Option that is not an Incentive Stock Option within the meaning of Section 422 of the Code.
  - (j) "Option" shall mean an Incentive Stock Option or a Nonstatutory Stock Option.
- (k) "Restricted Stock" shall mean an award of shares of Common Stock that is subject to certain conditions on vesting and restrictions on transferability as provided in Section 15 of the Plan.
- (I) "Section 162(m) of the Code" means the exception for performance-based compensation under Section 162(m) of the Code and any applicable Treasury regulations thereunder.
- (m) "Section 409A of the Code" means the nonqualified deferred compensation rules under Section 409A of the Code and any applicable Treasury regulations thereunder.

- (n) "Securities Act" shall mean the Securities Act of 1933, as amended.
- (o) "Stock Appreciation Right" or "SAR" shall mean a right to receive payment of the appreciated value of shares of Common Stock as provided in Section 10 of the Plan.
- (p) "Stock Award" shall mean an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock award, a Stock Appreciation Right or a Stock Bonus award.
  - (q) "Stock Bonus" shall mean a bonus award payable in shares of Common Stock as provided in Section 16 of the Plan.
- 3. Administration. The Plan shall be administered by the Board or the Committee. All references in the Plan to the "Committee" shall be deemed to refer to the "Board" if no committee is established for the purpose of making determinations with respect to the Plan. Except as herein specifically provided, the interpretation and construction by the Committee of any provision of the Plan or of any Stock Award granted under it shall be final and conclusive, provided, that, with regard to any provision of this Plan or any Award Agreement relating thereto that is intended to comply with Section 162(m) of the Code, any such action by the Committee shall be permitted only to the extent such action would be permitted under Section 162(m) of the Code. The Committee may, in its sole discretion, adopt special guidelines and provisions for persons who are residing in or employed in, or subject to, the taxes of, any domestic or foreign jurisdictions to comply with applicable tax and securities laws of such domestic or foreign jurisdictions. This Plan is intended to comply with the applicable provisions of Section 162(m) of the Code with respect to Awards intended to be "performance-based," and this Plan shall be limited, construed and interpreted in a manner so as to comply therewith. The receipt of a Stock Award by any members of the Committee shall not preclude their vote on any matters in connection with the administration or interpretation of the Plan.
- 4. Shares Subject to the Plan. The shares subject to Stock Awards granted under the Plan shall be the Common Stock, whether authorized but unissued or held in the Company's treasury, or shares purchased from stockholders expressly for use under the Plan. The maximum number of shares of Common Stock which may be issued pursuant to Stock Awards granted under the Plan shall not exceed in the aggregate four million two hundred fifty thousand (4,250,000) shares. The Company shall at all times while the Plan is in force reserve such number of shares of Common Stock as will be sufficient to satisfy the requirements of all outstanding Stock Awards granted under the Plan. In the event any Option or SAR granted under the Plan shall expire or terminate for any reason without having been exercised in full or shall cease for any reason to be exercisable in whole or in part, the unpurchased shares subject thereto shall again be available for Stock Awards under the Plan. In the event any shares of Restricted Stock are forfeited for any reason or the right to receive any Stock Bonus is terminated for any reason, the shares forfeited shall again be available for Stock Awards under the Plan. In the event shares of Common Stock are delivered to, or withheld by, the Company pursuant to Section 13(b) or 29 hereof, only the net number of shares issued, i.e., net of the shares so delivered or withheld, shall be considered to have been issued pursuant to the Plan.

5. Participation. The class of individuals and entities that shall be eligible to receive Stock Awards ("Grantees") under the Plan shall be (a) with respect to Incentive Stock Options, all employees of either the Company or any parent or subsidiary of the Company, and (b) with respect to all other Stock Awards, all employees and non-employee directors of, and consultants and advisors to, either the Company or any parent or subsidiary of the Company; provided, however, no Stock Award shall be granted to any such consultant or advisor unless (i) the consultant or advisor is a natural person (or an entity wholly-owned, directly or indirectly, by a natural person), (ii) bona fide services have been or are to be rendered by such consultant or advisor and (iii) such services are not in connection with the offer or sale of securities in a capital raising transaction and do not directly or indirectly promote or maintain a market for the Company's securities. The Committee, in its sole discretion, but subject to the provisions of the Plan, shall determine the employees and non-employee directors of, and the consultants and advisors to, the Company and its parents and subsidiaries to whom Stock Awards shall be granted, and the number of shares to be covered by each Stock Award grant, taking into account the nature of the employment or services rendered by the individuals or entities being considered, their annual compensation, their present and potential contributions to the success of the Company, and such other factors as the Committee may deem relevant. For purposes hereof, a non-employee to whom an offer of employment has been extended shall be considered an employee, provided that the Stock Award granted to such individual shall not be exercisable or vest, in whole or in part, for a period of at least one year from the date of grant and, in the event the individual does not commence employment with the Company, the Stock Award granted shall be considered null and void.

6. <u>Award Agreement</u>. Each Stock Award granted under the Plan shall be authorized by the Committee, and shall be evidenced by an Award Agreement which shall be executed by the Company and, in the discretion of the Committee, by the individual or entity to whom such Stock Award is granted. The Award Agreement shall specify the number of shares of Common Stock as to which the Stock Award is granted, the period during which any Option or SAR is exercisable and the option or base price per share thereof, the vesting periods for any Restricted Stock or Stock Bonus, any performance-based vesting criteria (the "Performance Goals") and such other terms and provisions as the Committee may deem necessary or appropriate, provided, that, with regard to any Stock Award that is intended to comply with Section 162(m) of the Code, any applicable performance criteria shall be based on one or more of the Performance Goals set forth in Exhibit A hereto and no such Stock Awards other than Options or SARs shall be granted on or after the fifth anniversary of the stockholder approval of the Plan unless the Performance Goals set forth on Exhibit A are reapproved (or other designated performance goals are approved) by the stockholders no later than the first stockholder meeting that occurs in the fifth year following the year in which stockholders approve the Performance Goals set forth on Exhibit A. The Committee shall have the authority to reduce the option price per share of an Option, provided that the reduced option price complies with the provisions of Section 7 or 8 hereof, as applicable, as of the date of such determination by the Committee.

- 7. <u>Incentive Stock Options</u>. The Committee may grant Incentive Stock Options under the Plan which are subject to the following terms and conditions and any other terms and conditions as may at any time be required by Section 422 of the Code:
  - (a) No Incentive Stock Option shall be granted to individuals other than employees of the Company or of a parent or subsidiary of the Company.
- (b) Each Incentive Stock Option under the Plan must be granted prior to November 17, 2020, which is within ten years from the date the Plan was adopted by the Board.
- (c) The option price of the shares subject to any Incentive Stock Option shall not be less than the Fair Market Value of the Common Stock at the time such Incentive Stock Option is granted; provided, however, if an Incentive Stock Option is granted to an individual who owns, at the time the Incentive Stock Option is granted, more than 10% of the total combined voting power of all classes of stock of the Company or of a parent or subsidiary of the Company (a "10% Stockholder"), the option price of the shares subject to the Incentive Stock Option shall be at least 110% of the Fair Market Value of the Common Stock at the time such Incentive Stock Option is granted.
- (d) No Incentive Stock Option granted under the Plan shall be exercisable after the expiration of ten years from the date of its grant; provided, however, if an Incentive Stock Option is granted to a 10% Stockholder, such Incentive Stock Option shall not be exercisable after the expiration of five years from the date of its grant. Every Incentive Stock Option granted under the Plan shall be subject to earlier termination as expressly provided in Section 12 hereof.
  - (e) For purposes of determining stock ownership under this Section 7, the attribution rules of Section 424(d) of the Code shall apply.
- 8. Nonstatutory Stock Options. The Committee may grant Nonstatutory Stock Options under the Plan. Nonstatutory Stock Options shall be subject to the following terms and conditions:
- (a) A Nonstatutory Stock Option may be granted to any individual or entity eligible to receive an Option under the Plan pursuant to clause (b) of Section 5 hereof.
- (b) Except as otherwise determined by the Committee, the option price of the shares subject to a Nonstatutory Stock Option shall not be less than the Fair Market Value of the Common Stock at the time such Nonstatutory Stock Option is granted.
  - (c) No Nonstatutory Stock Option granted under the Plan shall be exercisable after the expiration of ten years from the date of its grant.

9. **Reload Options**. The Committee may grant Options with a reload feature. A reload feature shall only apply when the option price is paid by delivery of Common Stock (as set forth in Section 13(b)(ii)) or by having the Company reduce the number of shares otherwise issuable to a Grantee (as provided for in the last sentence of Section 13(b)) (a "Net Exercise"). The Award Agreement for the Options containing the reload feature shall provide that the Grantee shall receive, contemporaneously with the payment of the option price in shares of Common Stock or in the event of a Net Exercise, a reload stock option (the "Reload Option") to purchase that number of shares of Common Stock equal to the sum of (i) the number of shares of Common Stock used to exercise the Option (or not issued in the case of a Net Exercise), and (ii) with respect to Nonstatutory Stock Options, the number of shares of Common Stock used to satisfy any tax withholding requirement incident to the exercise of such Nonstatutory Stock Option. The terms of the Plan applicable to the Option shall be equally applicable to the Reload Option with the following exceptions: (i) the option price per share of Common Stock deliverable upon the exercise of the Reload Option, (A) in the case of a Reload Option which is an Incentive Stock Option being granted to a person other than a 10% Stockholder or is a Nonstatutory Stock Option, shall be the Fair Market Value of a share of Common Stock on the date of grant of the Reload Option; and (ii) the term of the Reload Option shall be equal to the remaining option term of the Option (including a Reload Option) which gave rise to the Reload Option. The Reload Option containing a reload feature is not paid in shares of Common Stock, the reload feature shall have no application with respect to such exercise.

# 10. Stock Appreciation Rights.

- (a) The Committee may grant Stock Appreciation Rights to such persons eligible under the Plan as the Committee may select from time to time. SARs shall be granted at such times, in such amounts and under such other terms and conditions as the Committee shall determine, which terms and conditions shall be evidenced under an Award Agreement, subject to the terms of the Plan. Subject to the terms and conditions of the Award Agreement, an SAR shall entitle the Grantee to exercise the SAR, in whole or in part, in exchange for a payment of shares of Common Stock, cash or a combination thereof, as determined by the Committee and provided for in the Award Agreement, equal in value to the excess of the Fair Market Value of the shares of Common Stock underlying the SAR, determined on the date of exercise, over the base amount set forth in the Award Agreement for the shares of Common Stock underlying the SAR, which base amount shall not be less than the Fair Market Value of such Common Stock, determined as of the date the SAR is granted. The Company may, in its sole discretion, withhold from any such cash payment any amount necessary to satisfy the Company's obligation for withholding taxes with respect to such payment.
  - (b) No SAR granted under the Plan shall be exercisable after the expiration of ten years from the date of its grant.
  - (c) All references in the Plan to "Options" shall be deemed to include "SARs" where applicable.

# 11. Transferability of Options.

(a) No Option granted under the Plan shall be transferable by the individual or entity to whom it was granted other than by will or the laws of descent and distribution, and, during the lifetime of an individual, shall not be exercisable by any other person, but only by him.

(b) Notwithstanding Section 11(a) above, a Nonstatutory Stock Option granted under the Plan may be transferred in whole or in part during a Grantee's lifetime, upon the approval of the Committee, to a Grantee's "family members" (as such term is defined in Rule 701(c)(3) of the Securities Act and General Instruction A(1)(a)(5) to Form S-8) through a gift or domestic relations order. The transferred portion of a Nonstatutory Stock Option may only be exercised by the person or entity who acquires a proprietary interest in such Option pursuant to the transfer. The terms applicable to the transferred portion shall be the same as those in effect for the Option immediately prior to such transfer and shall be set forth in such documents issued to the transferee as the Committee may deem appropriate. As used in the Plan, the terms "Grantee" (when referring to an Option recipient) and "holder of an Option" shall refer to the grantee of the Option and not any transferee thereof.

# 12. Effect of Termination of Employment or Death on Options.

(a) Unless otherwise provided in the Award Agreement and except as provided in subsections (b) and (c) of this Section 12, if the employment of an employee by, or the services of a non-employee director for, or consultant or advisor to, the Company or a parent or subsidiary of the Company, shall terminate for any reason, then his Option may be exercised at any time within three months after such termination, subject to the provisions of subsection (d) of this Section 12. For purposes of this subsection (a), an employee, non-employee director, consultant or advisor who leaves the employ or services of the Company to become an employee or non-employee director of, or a consultant or advisor to, a parent or subsidiary of the Company or a corporation (or subsidiary or parent of the corporation) which has assumed the Option of the Company as a result of a corporate reorganization or like event shall not be considered to have terminated his employment or services.

(b) Unless otherwise provided in the Award Agreement, if the holder of an Option under the Plan dies (i) while employed by, or while serving as a non-employee director for or a consultant or advisor to, the Company or a parent or subsidiary of the Company, or (ii) within three months after the termination of his employment or services for any reason, then such Option may, subject to the provisions of subsection (d) of this Section 12, be exercised by the estate of the employee or non-employee director, consultant or advisor, or by a person who acquired the right to exercise such Option by bequest or inheritance or by reason of the death of such employee or non-employee director, consultant or advisor, at any time within one year after such death.

(c) Unless otherwise provided in the Award Agreement, if the holder of an Option under the Plan ceases employment or services because of permanent and total disability (within the meaning of Section 23(e)(3) of the Code) ("Permanent Disability") while employed by, or while serving as a non-employee director for or consultant or advisor to, the Company or a parent or subsidiary of the Company, then such Option may, subject to the provisions of subsection (d) of this Section 12, be exercised at any time within one year after his termination of employment, termination of directorship or termination of consulting or advisory services, as the case may be, due to the disability. Notwithstanding the foregoing, in the event the Company is a party to an employment, consulting or advisory agreement with a Grantee and such agreement provides for termination of employment or engagement based upon a disability or other incapacity, then, for such Grantee, a termination of employment or engagement for disability or other incapacity pursuant to the provisions thereof shall be considered to be a termination based upon Permanent Disability for purposes hereof. Furthermore, notwithstanding the foregoing, with respect to Stock Awards that are subject to Section 409A of the Code, Permanent Disability shall mean that a Grantee is disabled under Section 409A(a)(2)(c)(i) or (ii) of the Code.

(d) An Option may not be exercised pursuant to this Section 12 except to the extent that the holder was entitled to exercise the Option at the time of termination of employment, termination of directorship, termination of consulting or advisory services, or death, and in any event may not be exercised after the expiration of the Option.

(e) For purposes of this Section 12, the employment relationship of an employee of the Company or of a parent or subsidiary of the Company will be treated as continuing intact while he is on military or sick leave or other bona fide leave of absence (such as temporary employment by the Government) if such leave does not exceed 90 days, or, if longer, so long as his right to reemployment is guaranteed either by statute or by contract.

# 13. Exercise of Options.

(a) Unless otherwise provided in the Award Agreement, any Option granted under the Plan shall be exercisable, subject to vesting, in whole at any time, or in part from time to time, prior to expiration. The Committee, in its absolute discretion, may provide in any Award Agreement that the exercise of any Options granted under the Plan shall be subject (i) to such condition or conditions as it may impose, including, but not limited to, a condition that the holder thereof remain in the employ or service of, or continue to provide consulting or advisory services to, the Company or a parent or subsidiary of the Company for such period or periods from the date of grant of the Option as the Committee, in its absolute discretion, shall determine; and (ii) to such limitations as it may impose, including, but not limited to, a limitation that the aggregate Fair Market Value (determined at the time the Option is granted) of the Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any employee during any calendar year (under all plans of the Company and its parents and subsidiaries) shall not exceed \$100,000. In addition, in the event that under any Award Agreement the aggregate Fair Market Value (determined at the time the Option is granted) of the Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any employee during any calendar year (under all plans of the Company and its parents and subsidiaries corporations) exceeds \$100,000, the Committee may, when shares are transferred upon exercise of such Options, designate those shares which shall be treated as transferred upon exercise of an Incentive Stock Option and those shares which shall be treated as transferred upon exercise of a Nonstatutory Stock Option.

(b) An Option granted under the Plan shall be exercised by the delivery by the holder thereof to the Company at its principal office (attention of the Secretary) of written notice of the number of shares with respect to which the Option is being exercised. Such notice shall be accompanied, or followed within ten days of delivery thereof, by payment of the full option price of such shares, and payment of such option price shall be made by the holder's delivery of (i) his check payable to the order of the Company, or (ii) previously acquired Common Stock, the Fair Market Value of which shall be determined as of the date of exercise (provided that the shares delivered pursuant hereto are acceptable to the Committee in its sole discretion) or (iii) if provided for in the Award Agreement, his check payable to the order of the Company in an amount at least equal to the par value of the Common Stock being acquired, together with a promissory note, in form and upon such terms as are acceptable to the Committee, made payable to the order of the Company in an amount equal to the balance of the exercise price, or (iv) by the holder's delivery of any combination of the foregoing (i), (ii) and (iii). Alternatively, if provided for in the Award Agreement, the holder may elect to have the Company reduce the number of shares otherwise issuable by a number of shares having a Fair Market Value equal to the exercise price of the Option being exercised.

# 14. Further Conditions of Exercise of Options.

- (a) Unless prior to the exercise of the Option the shares issuable upon such exercise have been registered with the Securities and Exchange Commission pursuant to the Securities Act, the notice of exercise shall be accompanied by a representation or agreement of the person or estate exercising the Option to the Company to the effect that such shares are being acquired for investment purposes and not with a view to the distribution thereof, and such other documentation as may be required by the Company, unless in the opinion of counsel to the Company such representation, agreement or documentation is not necessary to comply with the Securities Act.
- (b) If the Common Stock is listed on any securities exchange, including, without limitation, Nasdaq, the Company shall not be obligated to deliver any Common Stock pursuant to this Plan until it has been listed on each such exchange. In addition, the Company shall not be obligated to deliver any Common Stock pursuant to this Plan until there has been qualification under or compliance with such federal or state laws, rules or regulations as the Company may deem applicable. The Company shall use reasonable efforts to obtain such listing, qualification and compliance.

# 15. Restricted Stock Grants.

- (a) The Committee may grant Restricted Stock under the Plan to any individual or entity eligible to receive Restricted Stock pursuant to clause (b) of Section 5 hereof.
- (b) In addition to any other applicable provisions hereof and except as may otherwise be specifically provided in an Award Agreement, the following restrictions in this Section 15(b) shall apply to grants of Restricted Stock made by the Committee:
- (i) No shares granted pursuant to a grant of Restricted Stock may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated until, and only to the extent that, such shares are vested.

(ii) Shares granted pursuant to a grant of Restricted Stock shall vest as determined by the Committee, as provided for in the Award Agreement. The foregoing notwithstanding (but subject to the discretion of the Committee and except as otherwise provided in the Award Agreement), a Grantee shall forfeit all shares not previously vested, if any, at such time as the Grantee is no longer employed by, or serving as a director of, or rendering consulting or advisory services to, the Company or a parent or subsidiary of the Company. All forfeited shares shall be returned to the Company.

- (c) In determining the vesting requirements with respect to a grant of Restricted Stock, the Committee may impose such restrictions on any shares granted as it may deem advisable including, without limitation, restrictions relating to length of service, corporate performance, attainment of individual or group Performance Goals, federal or state securities laws and Rule 162(m) of the Code, and may legend the certificates representing Restricted Stock to give appropriate notice of such restrictions. With regard to a Restricted Stock Award that is intended to comply with Section 162(m) of the Code, to the extent any such provision would create impermissible discretion under Section 162(m) of the Code or otherwise violate Section 162(m) of the Code, such provision shall be of no force or effect. The applicable Performance Goals shall be based on one or more of the performance criteria set forth in Exhibit A hereto. Any such restrictions shall be specifically set forth in the Award Agreement.
- (d) Certificates representing shares granted that are subject to restrictions shall be held by the Company or, if the Committee so specifies, deposited with a third-party custodian or trustee until lapse of all restrictions on the shares. After such lapse, certificates for such shares (or the vested percentage of such shares) shall be delivered by the Company to the Grantee; provided, however, that the Company need not issue fractional shares.
- (e) During any applicable period of restriction, the Grantee shall be the record owner of the Restricted Stock and shall be entitled to receive all dividends and other distributions paid with respect to such shares while they are so restricted. However, if any such dividends or distributions are paid in shares of Company stock or cash or other property during an applicable period of restriction, the shares, cash and/or other property deliverable shall be held by the Company or third party custodian or trustee and be subject to the same restrictions as the shares with respect to which they were issued. Moreover, the Committee may provide in each grant such other restrictions, terms and conditions as it may deem advisable with respect to the treatment and holding of any stock, cash or property that is received in exchange for Restricted Stock granted pursuant to the Plan.
- (f) Each Grantee making an election pursuant to Section 83(b) of the Code shall, upon making such election, promptly provide a copy thereof to the Company.

# 16. Stock Bonus Grants.

(a) The Committee may grant Stock Bonus awards to such persons eligible under the Plan as the Committee may select from time to time. Stock Bonus awards shall be granted at such times, in such amounts and under such other terms and conditions as the Committee shall determine, which terms and conditions shall be evidenced under an Award Agreement, subject to the terms of the Plan. Upon satisfaction of any conditions, limitations and restrictions set forth in the Award Agreement, a Stock Bonus award shall entitle the recipient to receive payment of a bonus described under the Stock Bonus award in the form of shares of Common Stock of the Company. Prior to the date on which a Stock Bonus award is required to be paid under an Award Agreement, the Stock Bonus award shall constitute an unfunded, unsecured promise by the Company to distribute Common Stock in the future.

(b) The Committee may condition the grant or vesting of Stock Bonus Awards upon the attainment of specified Performance Goals set forth on Exhibit A as the Committee may determine, in its sole discretion, provided that, to the extent that such Stock Bonus Awards are intended to comply with Section 162(m) of the Code, the Committee shall establish the objective Performance Goals for the vesting of such Stock Bonus Awards based on a performance period applicable to each Grantee or class of Grantees in writing prior to the beginning of the applicable performance period or at such later date as permitted under Section 162(m) of the Code and while the outcome of the Performance Goals are substantially uncertain. Such Performance Goals may incorporate, if and only to the extent permitted under Section 162(m) of the Code, provisions for disregarding (or adjusting for) changes in accounting methods, corporate transactions (including, without limitation, dispositions and acquisitions) and other similar type events or circumstances. To the extent any such provision would create impermissible discretion under Section 162(m) of the Code or otherwise violate Section 162(m) of the Code, such provision shall be of no force or effect. The applicable Performance Goals shall be based on one or more of the performance criteria set forth in Exhibit A hereto.

(c) Shares granted pursuant to a Stock Bonus shall vest as determined by the Committee, as provided for in the Award Agreement. The foregoing notwithstanding (but subject to the discretion of the Committee and except as otherwise provided in the Award Agreement), a Grantee shall forfeit the right to receive all shares not previously vested, if any, at such time as the Grantee is no longer employed by, or serving as a director of, or rendering consulting or advisory services to, the Company or a parent or subsidiary of the Company.

# 17. Adjustment Upon Change in Capitalization.

(a) In the event that the outstanding Common Stock is hereafter changed by reason of reorganization, merger, consolidation, recapitalization, reclassification, stock split-up, combination of shares, reverse split, stock dividend or the like, an appropriate adjustment shall be made by the Committee in the aggregate number of shares available under the Plan, in the number of shares and option price per share subject to outstanding Options, in the number of shares issuable pursuant to outstanding Stock Bonus grants, and in any limitation on exerciseability referred to in Section 13(a)(ii) hereof which is set forth in outstanding Incentive Stock Options. If the Company shall be reorganized, consolidated, or merged with another corporation, subject to the provisions of Section 20 hereof, the holder of an Option shall be entitled to receive upon the exercise of his Option, and the Grantee of a Stock Bonus shall be entitled to receive upon satisfaction of any conditions, limitations and restrictions set forth in the Award Agreement with respect to the Stock Bonus, the same number and kind of shares of stock or the same amount of property, cash or securities as he would have been entitled to receive upon the happening of any such corporate event as if he had been, immediately prior to such event, the holder of the number of shares covered by his Option or subject to the Stock Bonus; provided, however, that, in such event, the Committee shall have the discretionary power to take any action necessary or appropriate to prevent any Incentive Stock Option granted hereunder which is intended to be an "incentive stock option" from being disqualified as such under the then existing provisions of the Code or any law amendatory thereof or supplemental thereto; and provided, further, that in such event the Committee shall have the discretionary power to take any action necessary or appropriate to prevent such adjustment from being deemed or considered as the adoption of a new plan requiring shareholder approval under Section 422

(b) Any adjustment in the number of shares shall apply proportionately to only the unexercised portion of the Option, or the unissued shares subject to an outstanding Stock Bonus, granted hereunder. If fractions of a share would result from any such adjustment, the adjustment shall be revised to the next lower whole number of shares.

18. Rights of Grantees. The holder of an Option granted under the Plan shall have none of the rights of a stockholder with respect to the Common Stock covered by his Option until such Common Stock shall be transferred to him upon the exercise of his Option. The recipient of a Stock Bonus under the Plan shall have none of the rights of a stockholder with respect to the Common Stock covered by the Stock Bonus until the date on which the Grantee is entitled to receive the Common Stock pursuant to the Award Agreement.

# 19. Restrictions Upon Shares; Right of First Refusal.

- (a) No Grantee shall, for value or otherwise, sell, assign, transfer or otherwise dispose of all or any part of the shares issued pursuant to the exercise of an Option or received as Restricted Stock or pursuant to a Stock Bonus (collectively, the "Shares"), or of any beneficial interest therein (collectively a "Disposition"), except as permitted by and in accordance with the provisions of the Plan. The Company shall not recognize as valid or give effect to any Disposition of any Shares or interest therein upon the books of the Company unless and until the Grantee desiring to make such Disposition shall have complied with the provisions of the Plan.
- (b) No Grantee shall, without the written consent of the Company, pledge, encumber, create a security interest in or lien on, or in any way attempt to otherwise impose or suffer to exist any lien, attachment, levy, execution or encumbrance on the Shares.
- (c) If, at any time, a Grantee desires to make a Disposition of any of the Shares (the "Offered Shares") to any third-party individual or entity pursuant to a bona fide offer (the "Offer"), he shall give written notice of his intention to do so ("Notice of Intent to Sell") to the Company, which notice shall specify the name(s) of the offeror(s) (the "Proposed Offeror(s)"), the price per share offered for the Offered Shares and all other terms and conditions of the proposed transaction. Thereupon, the Company shall have the option to purchase from the Grantee all, but not less than all, the Offered Shares upon the same terms and conditions as set forth in the Offer.
- (d) If the Company desires to purchase all of the Offered Shares, it must send a written notice to such effect to the Grantee within 30 days following receipt of the Notice of Intent to Sell.

- (e) The closing of any purchase and sale of the Offered Shares shall take place 60 days following receipt by the Company of the Notice of Intent to
- Sell.
  - (f) If the Company does not elect to purchase all of the Offered Shares within the period set forth in paragraph (d) hereof, no Shares may be purchased by the Company, and the Grantee shall thereupon be free to dispose of such Shares to the Proposed Offeror(s) strictly in accordance with the terms of the Offer. If the Offered Shares are not disposed of strictly in accordance with the terms of the Offer within a period of 120 days after the Grantee gives a Notice of Intent to Sell, such Shares may not thereafter be sold without compliance with the provisions hereof.
    - (g) All certificates representing the Shares shall bear on the face or reverse side thereof the following legend:
    - "The shares represented by this certificate are subject to the provisions of the Stem Cell Assurance, Inc. 2010 Equity Participation Plan, a copy of which is on file at the offices of the Company."
  - (h) The provisions of this Section 19 shall only take effect if expressly provided for in the particular Award Agreement, shall be of no force or effect during such time that the Company is subject to the reporting requirements of the Exchange Act pursuant to Section 13 or 15(d) thereof and shall be subject to the provisions of any and all agreements hereafter entered into to which both the Company and any Grantee are parties that provide for a right of first refusal with respect to the Disposition of Shares.
  - 20. <u>Liquidation, Merger or Consolidation</u>. Notwithstanding Section 13(a) hereof, if the Board approves a plan of complete liquidation or a merger or consolidation (other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity), at least 50% of the combined voting power of the voting securities of the Company (or such surviving entity) outstanding immediately after such merger or consolidation), the Committee may, in its sole discretion, upon written notice to the holder of an Option, provide that the Option must be exercised within 20 days following the date of such notice or it will be terminated. In the event such notice is given, the Option shall become immediately exercisable in full.
  - 21. "Market Stand-off". No Grantee may, without the prior written consent of the managing underwriter, do any of the following during the period commencing on the date of the final prospectus relating to the Company's first underwritten public offering of its Common Stock under the Securities Act after the Adoption Date (as hereinafter defined) (the "IPO") and ending on the date specified by the Company and the managing underwriter (such period not to exceed 180 days in the case of the IPO; provided, however, that if (a) during the last 17 days of the initial lock-up period, the Company releases earnings results or announces material news or a material event or (b) prior to the expiration of the initial lock-up period, the Company announces that it will release earnings results during the 15-day period following the last day of the initial lock-up period, then in each case the lock-up period will be automatically extended until the expiration of the 18-day period beginning on the date of release of the earnings results or the announcement of the material news or material event, as applicable): (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any of the Shares held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 21 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall be applicable to the Grantees only if all officers, directors, and stockholders individually owning more than 5% of the Company's outstanding Common Stock are subject to the same restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 21 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party to the Award Agreement executed pursuant hereto. Each Grantee shall execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 21 or that are necessary to give further effect thereto.

22. Effectiveness of the Plan. The Plan was adopted by the Board on November 17, 2010 (the "Adoption Date"). The Plan shall be subject to approval on or before November 17, 2011, which is within one year of the Adoption Date, by the affirmative vote of the holders of a majority of the votes of the outstanding shares of capital stock of the Company present in person or represented by proxy at a meeting of stockholders and entitled to vote thereon (or in the case of action by written consent in lieu of a meeting of stockholders, the number of votes required by applicable law to act in lieu of a meeting) ("Stockholder Approval"). In the event such Stockholder Approval is withheld or otherwise not received on or before the latter date, the Plan and, unless otherwise provided in the Award Agreement, all Options, SARs, Restricted Stock and rights to Bonus Shares that may have been granted hereunder shall become null and void.

## 23. Termination, Modification and Amendment.

- (a) The Plan (but not Options previously granted under the Plan) shall terminate on November 17, 2020 (the "Termination Date"), which is within ten years from the Adoption Date, or sooner as hereinafter provided, and no Stock Award shall be granted after termination of the Plan. The foregoing shall not be deemed to limit the vesting period for Options, SARs, Restricted Stock or Stock Bonuses granted pursuant to the Plan.
- (b) The Plan may from time to time be terminated, modified, or amended if Stockholder Approval of the termination, modification or amendment is obtained.
- (c) Notwithstanding paragraph (b) hereof, the Board may at any time, on or before the Termination Date, without Stockholder Approval, terminate the Plan, or from time to time make such modifications or amendments to the Plan as it may deem advisable; provided, however, that the Board shall not, without Stockholder Approval, (i) increase (except as otherwise provided by Section 17 hereof) the maximum number of shares as to which Incentive Stock Options may be granted hereunder, change the designation of the employees or class of employees eligible to receive Incentive Stock Options, or make any other change which would prevent any Incentive Stock Option granted hereunder which is intended to be an "incentive stock option" from qualifying as such under the then existing provisions of the Code or any law amendatory thereof or supplemental thereto or (ii) make any other modifications or amendments that require Stockholder Approval pursuant to applicable law, regulation or exchange requirements, including, without limitation, Section 162(m) of the Code. In the event Stockholder Approval is not received within one year of adoption by the Board of the change provided for in (i) or (ii) above, then, unless otherwise provided in the Award Agreement (but subject to applicable law), the change and all Stock Awards that may have been granted pursuant thereto shall be null and void.

- (d) No termination, modification, or amendment of the Plan may, without the consent of the Grantee to whom any Stock Award shall have been granted, adversely affect the rights conferred by such Stock Award.
- 24. Not a Contract of Employment. Nothing contained in the Plan or in any Award Agreement executed pursuant hereto shall be deemed to confer upon any individual or entity to whom a Stock Award is or may be granted hereunder any right to remain in the employ or service of the Company or a parent or subsidiary of the Company or any entitlement to any remuneration or other benefit pursuant to any consulting or advisory arrangement.
  - 25. <u>Use of Proceeds</u>. The proceeds from the sale of shares pursuant to Stock Awards granted under the Plan shall constitute general funds of the Company.
- 26. <u>Indemnification of Board of Directors or Committee</u>. In addition to such other rights of indemnification as they may have, the members of the Board or the Committee, as the case may be, shall be indemnified by the Company to the extent permitted under applicable law against all costs and expenses reasonably incurred by them in connection with any action, suit, or proceeding to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan or any rights granted thereunder and against all amounts paid by them in settlement thereof or paid by them in satisfaction of a judgment of any such action, suit or proceeding, except a judgment based upon a finding of bad faith. Upon the institution of any such action, suit, or proceeding, the member or members of the Board or the Committee, as the case may be, shall notify the Company in writing, giving the Company an opportunity at its own cost to defend the same before such member or members undertake to defend the same on his or their own behalf.
  - 27. Captions. The use of captions in the Plan is for convenience. The captions are not intended to provide substantive rights.
- 28. <u>Disqualifying Dispositions</u>. If Common Stock acquired upon exercise of an Incentive Stock Option granted under the Plan is disposed of within two years following the date of grant of the Incentive Stock Option or one year following the issuance of the Common Stock to the Grantee, or is otherwise disposed of in a manner that results in the Grantee being required to recognize ordinary income, rather than capital gain, from the disposition (a "Disqualifying Disposition"), the holder of the Common Stock shall, immediately prior to such Disqualifying Disposition, notify the Company in writing of the date and terms of such Disqualifying Disposition and provide such other information regarding the Disqualifying Disposition as the Company may reasonably require.

#### 29. Withholding Taxes.

- (a) Whenever under the Plan shares of Common Stock are to be delivered to a Grantee upon exercise of a Nonstatutory Stock Option or to a Grantee of Restricted Stock or a Stock Bonus, the Company shall be entitled to require as a condition of delivery that the Grantee remit or, at the discretion of the Committee, agree to remit when due, an amount sufficient to satisfy all current or estimated future Federal, state and local income tax withholding requirements, including, without limitation, the employee's portion of any employment tax requirements relating thereto. At the time of a Disqualifying Disposition, the Grantee shall remit to the Company in cash the amount of any applicable Federal, state and local income tax withholding and the employee's portion of any employment taxes.
- (b) The Committee may, in its discretion, provide any or all holders of Nonstatutory Stock Options or Grantees of Restricted Stock or Stock Bonus with the right to use shares of Common Stock in satisfaction of all or part of the withholding taxes to which such holders may become subject in connection with the exercise of their Options or their receipt of Restricted Stock or Stock Bonus. Such right may be provided to any such holder in either or both of the following formats:
- (i) The election to have the Company withhold, from the shares of Common Stock otherwise issuable upon the exercise of such Nonstatutory Stock Option or otherwise deliverable as a result of the vesting of Restricted Stock or the satisfaction of the conditions, limitations and restrictions with respect to a Stock Bonus, a portion of those shares with an aggregate fair market value equal to the percentage of the withholding taxes (not to exceed 100%) designated by the holder.
- (ii) The election to deliver to the Company, at the time the Nonstatutory Stock Option is exercised or Restricted Stock is granted or vested or the conditions, limitations and restrictions are satisfied for a Stock Bonus, one or more shares of Common Stock previously acquired by such holder (other than in connection with the Option exercise or Restricted Stock or Stock Bonus grant triggering the withholding taxes) with an aggregate Fair Market Value equal to the percentage of the withholding taxes (not to exceed 100%) designated by the holder.
- 30. Section 409A of the Code. Although the Company does not guarantee the particular tax treatment of Stock Awards granted under the Plan, Stock Awards made under the Plan are intended to comply with, or be exempt from, the applicable requirements of Section 409A of the Code and the Plan and any Award Agreement hereunder shall be limited, construed and interpreted in accordance with such intent. To the extent that any Stock Award is subject to Section 409A of the Code, it shall be paid in a manner that will comply with Section 409A of the Code, including proposed, temporary or final regulations or any other guidance issued by the Secretary of the Treasury and the Internal Revenue Service with respect thereto. In no event whatsoever shall the Company or any of its affiliates be liable for any additional tax, interest or penalties that may be imposed on a Grantee by Section 409A of the Code or any damages for failing to comply with Section 409A of the Code or this Section 30. Notwithstanding anything in the Plan or in a Stock Award to the contrary, the following provisions shall apply to any Stock Award granted under the Plan that constitutes "non-qualified deferred compensation" pursuant to Section 409A of the Code (a "409A Covered Award"):

- (a) A termination of employment shall not be deemed to have occurred for purposes of any provision of a 409A Covered Award providing for payment upon or following a termination of the Grantee's employment unless such termination is also a "Separation from Service" within the meaning of Code Section 409A and, for purposes of any such provision of a 409A Covered Award, references to a "termination," "termination of employment" or like terms shall mean Separation from Service. Notwithstanding any provision to the contrary in the Plan or the Stock Award, if the Grantee is deemed on the date of the Grantee's termination of service to be a "specified employee" within the meaning of that term under Code Section 409A(a)(2)(B) and using the identification methodology selected by the Company from time to time, or if none, the default methodology set forth in Code Section 409A, then with regard to any such payment under a 409A Covered Award, to the extent required to be delayed in compliance with Code Section 409A(a)(2)(B), such payment shall not be made prior to the earlier of (i) the expiration of the six (6)-month period measured from the date of the Grantee's Separation from Service, and (ii) the date of the Grantee's death. All payments delayed pursuant to this Section 30 shall be paid to the Grantee on the first day of the seventh month following the date of the Grantee's Separation from Service or, if earlier, on the date of the Grantee's death.
- (b) Whenever a payment under a 409A Covered Award specifies a payment period with reference to a number of days, the actual date of payment within the specified period shall be within the sole discretion of the Company.
- (c) If under a 409A Covered Award an amount is to be paid in two or more installments, for purposes of Code Section 409A, each installment shall be treated as a separate payment.
- 31. Other Provisions. Each Stock Award under the Plan may contain such other terms and conditions not inconsistent with the Plan as may be determined by the Committee, in its sole discretion. Notwithstanding the foregoing, each Incentive Stock Option granted under the Plan shall include those terms and conditions which are necessary to qualify the Incentive Stock Option as an "incentive stock option" within the meaning of Section 422 of the Code and the regulations thereunder and shall not include any terms and conditions which are inconsistent therewith.
- 32. Governing Law. The Plan shall be governed by, and all questions arising hereunder shall be determined in accordance with, the laws of the State of Delaware, excluding choice of law principles thereof.

# Exhibit A PERFORMANCE GOALS

Performance Goals for the purposes of the vesting of performance-based Stock Awards shall be based upon one or more of the following business criteria (which may be determined for these purposes by reference to (i) the Company as a whole, (ii) any of the Company's subsidiaries, operating divisions, regional business units or other operating units, or (iii) any combination thereof): profit before taxes, stock price, market share, gross revenue, net revenue, pre-tax income, operating income, cash flow, earnings per share, return on equity, return on invested capital or assets, cost reductions and savings, return on revenues or productivity, or any other business criteria the Committee deems appropriate, which may be modified at the discretion of the Committee to take into account significant nonrecurring items, or an event or events either not directly relating to the operations of the Company or not within the reasonable control of the Company's management, or a change in accounting standards required by generally accepted accounting principles, or which may be adjusted to reflect such costs or expenses as the Committee deems appropriate.

BioRestorative Therapies, Inc.

40 Marcus Drive, Suite One Melville, New York 11747

March 1, 2017

Mr. Francisco Silva 10 Flyers Lane Tustin, California 92782

Dear Mr. Silva:

Reference is made to the Executive Employment Agreement, dated as of May 10, 2011, between BioRestorative Therapies, Inc. (the "Company") and you (the "Executive"), as amended (the "Employment Agreement"). All capitalized terms used and not defined herein shall have the meanings ascribed to them in the Employment Agreement.

Pursuant to the Employment Agreement, the Executive is entitled to receive an annual bonus of up to 20% of his Per Annum Salary based upon the satisfaction of certain performance goals. The parties agree that, for the year ended December 31, 2016, the Executive instead is entitled to receive an annual bonus of up to 16% of his Per Annum Salary based upon the satisfaction of the revised performance goals set forth on Schedule A attached hereto. The Company acknowledges and agrees that, as of the date hereof, the initial three (3) performance goals set forth on Schedule A have been satisfied.

The parties agree further that the performance goals for the year ending December 31, 2017, and the bonus amount payable with respect thereto, are as set forth on Schedule B attached hereto.

Except as amended hereby, the Employment Agreement shall continue in full force and effect in accordance with its terms.

	Except to another hereby, the Employment Agreement shall continue in this local and effect in decordance with its terms.		
	Very truly yours,		
	BIORESTORATIVE THERAPIES, INC.		
	By:		
	Mark Weinreb, Chief Executive Officer		
Agreed:			
Francisco Silva			

### SCHEDULE A

### 2016 Bonus Milestones:

- \$6,000 in the event that the Company has an article published by a peer-reviewed journal with regard to its brtxDISC Program or ThermoStem Program;
- \$20,000 in the event the Company files an IND application with regard to the commencement of a clinical trial for the Company's BRTX-100 product (the "Clinical Trial") (the "IND Application") with the Food and Drug Administration (the "FDA");
- \$6,000 in the event the FDA clears the IND Application;
- \$8,000 in the event the Company commences a brown fat animal study utilizing a potential human delivery system.

It is understood and agreed that (i) the filing of the IND Application with the FDA had to be achieved by December 31, 2016 in order for the Executive to be entitled to receive the Bonus amount; and (ii) the other milestones may occur by July 31, 2017. In addition, the Executive must have remained continuously employed with the Company through the date on which a particular milestone is satisfied in order for the Executive to be entitled to receive the particular Bonus amount. Any issue as to whether any of the foregoing milestones have been satisfied shall be determined by the Company in its sole discretion.

### SCHEDULE B

### 2017 Bonus Milestones:

- \$10,000 in the event that the Company has an article published during 2017 by a peer-reviewed journal with regard to its brtxDISC Program or ThermoStem Program;
- \$10,000 in the event the Company receives written approval to receive one or more grants, for an aggregate amount of at least \$250,000, for research related to either the Company's brtxDISC Program or ThermoStem Program;
- \$20,000 in the event a patient in the Clinical Trial receives a dose of BRTX-100;
- \$10,000 in the event the Company indentifies a novel cell-based biologic and files for intellectual property protection relating thereto.

It is understood and agreed that each of the foregoing milestones must be achieved by December 31, 2017 in order for the Executive to be entitled to receive the Bonus amount. In addition, the Executive must have remained continuously employed with the Company through the date on which a particular milestone is satisfied in order for the Executive to be entitled to receive the particular Bonus amount. Any issue as to whether any of the foregoing milestones have been satisfied shall be determined by the Company in its sole discretion.

BioRestorative Therapies, Inc. 40 Marcus Drive, Suite One Melville, New York 11747

March 1, 2017

Mr. Edward L. Field 3706 St. Marks Road Durham, North Carolina 27707

Dear Mr. Field:

Reference is made to the Executive Employment Agreement, dated as of February 9, 2015, between BioRestorative Therapies, Inc. (the "Company") and you (the "Executive"), as amended (the "Employment Agreement"). All capitalized terms used and not defined herein shall have the meanings ascribed to them in the Employment Agreement.

Pursuant to the Employment Agreement, the Executive is entitled to receive an annual bonus of up to 30% of his Per Annum Salary based upon the satisfaction of certain performance goals. The parties agree that, for the year ended December 31, 2016, the Executive instead is entitled to receive an annual bonus of up to 24% of his Per Annum Salary based upon the satisfaction of the revised performance goals set forth on Schedule A attached hereto. The Company acknowledges and agrees that, as of the date hereof, the initial two (2) performance goals set forth on Schedule A have been satisfied.

The parties agree further that the performance goals for the year ending December 31, 2017, and the bonus amount payable with respect thereto, are as set forth on Schedule B attached hereto.

	Except as amended hereby, the Employment Agreement shall continue in full force and effect in accordance with its terms.		
	Ve	ery truly yours,	
	ВІ	ORESTORATIVE THERAPIES, INC.	
	Ву	Mark Weinreb, Chief Executive Officer	
Agreed:			
Edward L. F	ield		

### SCHEDULE A

### 2016 Bonus Milestones:

- \$36,000 in the event the Company files an IND application with regard to the commencement of a clinical trial for the Company's BRTX-100 product (the "Clinical Trial") (the "IND Application") with the Food and Drug Administration (the "FDA");
- \$18,000 in the event the FDA clears the IND Application;
- \$18,000 upon testing and receipt of certification that the Company's fully equipped cleanroom has attained an ISO Class 7 cleanliness level.

It is understood and agreed that (i) the filing of the IND Application with the FDA had to be achieved by December 31, 2016 in order for the Executive to be entitled to receive the Bonus amount; and (ii) the other milestones may occur by July 31, 2017. In addition, the Executive must have remained continuously employed with the Company through the date on which a particular milestone is satisfied in order for the Executive to be entitled to receive the particular Bonus amount. Any issue as to whether any of the foregoing milestones have been satisfied shall be determined by the Company in its sole discretion.

### SCHEDULE B

### 2017 Bonus Milestones:

- \$18,000 in the event of IRB approval at one site to commence the Clinical Trial;
- \$36,000 in the event a patient in the Clinical Trial receives a dose of BRTX-100;
- \$18,000 in the event at least six patients enroll in the Clinical Trial;
- \$18,000 in the event the Company completes two mock production runs of BRTX-100 in its cleanroom in which BRTX-100 meets all specified product release requirements

It is understood and agreed that each of the foregoing milestones must be achieved by December 31, 2017 in order for the Executive to be entitled to receive the Bonus amount. In addition, the Executive must have remained continuously employed with the Company through the date on which a particular milestone is satisfied in order for the Executive to be entitled to receive the particular Bonus amount. Any issue as to whether any of the foregoing milestones have been satisfied shall be determined by the Company in its sole discretion.

STOCK OPTION AGREEMENT, made as of the 10 <sup>th</sup> day of June, 2016, between <b>BIORESTORATIVE THERAPIES, INC.,</b> a Delaware corporation (the "Company"), and (the "Optionee").
WHEREAS, the Optionee serves as a director of the Company; and
WHEREAS, the Company desires to provide to the Optionee an additional incentive to promote the success of the Company.
<b>NOW</b> , <b>THEREFORE</b> , in consideration of the foregoing, the Company hereby grants to the Optionee the right and option to purchase shares of Common Stock of the Company under and pursuant to the terms and conditions of the Company's 2010 Equity Participation Plan (the "Plan") and upon and subject to the following terms and conditions:
1. <b>GRANT OF OPTION</b> . The Company hereby grants to the Optionee the right and option (the "Option") to purchase up to () shares of Common Stock of the Company (the "Option Shares") during the following periods:
(a) All or any part of () shares of Common Stock may be purchased during the period commencing on the date hereof and terminating at 5:00 P.M. on June 10, 2026 (the "Expiration Date").
(b) All or any part of () shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2017 and terminating at 5:00 P.M. on the Expiration Date.
(c) All or any part of () shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2018 and terminating at 5:00 P.M. on the Expiration Date.
2. NATURE OF OPTION. The Option is not intended to meet the requirements of Section 422 of the Internal Revenue Code of 1986, as amended, relating to "incentive stock options".
3. <b>EXERCISE PRICE</b> . The exercise price of each of the Option Shares shall be Three Dollars and Seventy-Three Cents (\$3.73) (the "Exercise Price"). The Company shall pay all original issue or transfer taxes on the exercise of the Option.
4. <u>EXERCISE OF OPTIONS</u> . (a) The Option shall be exercised in accordance with the provisions of the Plan. As soon as practicable after the receipt of notice of exercise and payment of the Exercise Price as provided for in the Plan, the Company shall tender to the Optionee a certificate issued in the Optionee's name evidencing the number of Option Shares covered thereby.

(b) The Company agrees that, as contemplated in Section 13(b) of the Plan, the Optionee may elect to have the Company reduce the number of Option Shares otherwise issuable by a number of Option Shares having a Fair Market Value (as defined in the Plan) equal to the exercise price of the Option being exercised. In the event of such election, the Company shall issue to the Optionee a number of Option Shares computed using the following formula:

$$X = \underbrace{Y(A-B)}_{A}$$

Where X = the number of Option Shares to be issued to the Optionee

Y = the number of Option Shares subject to this Option (or the portion thereof being cancelled)

A = the Fair Market Value of one Option Share

B = the Exercise Price

- 5. **TRANSFERABILITY**. The Option shall not be transferable other than by will or the laws of descent and distribution and, during the Optionee's lifetime, shall not be exercisable by any person other than the Optionee.
- 6. **TERMINATION OF DIRECTORSHIP**. To the extent the Option becomes exercisable, the Option shall remain exercisable until twelve (12) months following any subsequent termination of directorship with the Company or its subsidiaries for any reason whatsoever but in no event shall the Option be exercisable after the Expiration Date.
  - 7. INCORPORATION BY REFERENCE. The terms and conditions of the Plan are hereby incorporated by reference and made a part hereof.
- 8. NOTICES. Any notice or other communication given hereunder shall be deemed sufficient if in writing and hand delivered or sent by registered or certified mail, return receipt requested, addressed to the Company, 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Chief Executive Officer, and to the Optionee at the address indicated below. Notices shall be deemed to have been given on the date of hand delivery or mailing, except notices of change of address, which shall be deemed to have been given when received.
- 9. **BINDING EFFECT**. This Stock Option Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective legal representatives, successors and assigns.
- 10. **ENTIRE AGREEMENT**. This Stock Option Agreement, together with the Plan, contains the entire understanding of the parties hereto with respect to the subject matter hereof and may be modified only by an instrument executed by the party sought to be charged.

- 11. **GOVERNING LAW**. This Stock Option Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, excluding choice of law rules thereof.
- 12. **EXECUTION IN COUNTERPARTS**. This Stock Option Agreement may be executed in counterparts, each of which shall be deemed to be an original, but both of which together shall constitute one and the same instrument.
  - 13. FACSIMILE SIGNATURES. Signatures hereon which are transmitted via facsimile, or other electronic image, shall be deemed original signatures.
- 14. <u>INTERPRETATION</u>; <u>HEADINGS</u>. The provisions of this Stock Option Agreement shall be interpreted in a reasonable manner to give effect to the intent of the parties hereto. The headings and captions under sections and paragraphs of this Stock Option Agreement are for convenience of reference only and do not in any way modify, interpret or construe the intent of the parties or affect any of the provisions of this Stock Option Agreement.

[Remainder of page intentionally left blank; signature page follows]

IN WITNESS WHEREOF, the parties have executed this Stock Option Agreement as of the day and year first above written.	
BIOR	ESTORATIVE THERAPIES, INC.
Ву:	
Name	Mark Weinreb
Title:	Chief Executive Officer
Signat	ure of Optionee
Name	of Optionee
Addre	ss of Optionee
4	

STOCK OPTION AGREEMENT, made as of the 10 <sup>th</sup> day of June, 2016, between <b>BIORESTORATIVE THERAPIES, INC.,</b> a Delaware corporation (the "Company"), and (the "Optionee").
WHEREAS, the Optionee is an employee of the Company; and
WHEREAS, the Company desires to provide to the Optionee an additional incentive to promote the success of the Company.
<b>NOW</b> , <b>THEREFORE</b> , in consideration of the foregoing, the Company hereby grants to the Optionee the right and option to purchase shares of Common Stock of the Company under and pursuant to the terms and conditions of the Company's 2010 Equity Participation Plan (the "Plan") and upon and subject to the following terms and conditions:
1. <b>GRANT OF OPTION</b> . The Company hereby grants to the Optionee the right and option (the "Option") to purchase up to () shares of Common Stock of the Company (the "Option Shares") during the following periods:
(a) All or any part of () shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2017 and terminating at 5:00 P.M. on June 10, 2026 (the "Expiration Date").
(b) All or any part of () shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2018 and terminating at 5:00 P.M. on the Expiration Date.
(c) All or any part of () shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2019 and terminating at 5:00 P.M. on the Expiration Date.
2. <u>NATURE OF OPTION</u> . The Option is not intended to meet the requirements of Section 422 of the Internal Revenue Code of 1986, as amended, relating to "incentive stock options".
3. <b>EXERCISE PRICE</b> . The exercise price of each of the Option Shares shall be Three Dollars and Seventy-Three Cents (\$3.73) (the "Exercise Price"). The Company shall pay all original issue or transfer taxes on the exercise of the Option.
4. EXERCISE OF OPTIONS. (a) The Option shall be exercised in accordance with the provisions of the Plan. As soon as practicable after the receipt of notice of exercise and payment of the Exercise Price as provided for in the Plan, the Company shall tender to the Optionee a certificate issued in the Optionee's name evidencing the number of Option Shares covered thereby.

(b) The Company agrees that, as contemplated in Section 13(b) of the Plan, the Optionee may elect to have the Company reduce the number of Option Shares otherwise issuable by a number of Option Shares having a Fair Market Value (as defined in the Plan) equal to the exercise price of the Option being exercised. In the event of such election, the Company shall issue to the Optionee a number of Option Shares computed using the following formula:

 $X = \underline{Y(A-B)}$ 

Where = the number of Option Shares to be issued to the Optionee

Х

Y = the number of Option Shares subject to this Option (or the portion thereof being cancelled)

A = the Fair Market Value of one Option Share

B = the Exercise Price

- 5. **TRANSFERABILITY**. The Option shall not be transferable other than by will or the laws of descent and distribution and, during the Optionee's lifetime, shall not be exercisable by any person other than the Optionee.
- 6. **TERMINATION OF EMPLOYMENT**. To the extent the Option has become exercisable at the time of any termination of employment with the Company or its subsidiaries for any reason whatsoever, the Option shall remain exercisable until twelve (12) months following such termination but in no event shall the Option be exercisable after the Expiration Date.
  - 7. INCORPORATION BY REFERENCE. The terms and conditions of the Plan are hereby incorporated by reference and made a part hereof.
- 8. NOTICES. Any notice or other communication given hereunder shall be deemed sufficient if in writing and hand delivered or sent by registered or certified mail, return receipt requested, addressed to the Company, 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Chief Executive Officer, and to the Optionee at the address indicated below. Notices shall be deemed to have been given on the date of hand delivery or mailing, except notices of change of address, which shall be deemed to have been given when received.
- 9. **BINDING EFFECT**. This Stock Option Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective legal representatives, successors and assigns.
- 10. **ENTIRE AGREEMENT**. This Stock Option Agreement, together with the Plan, contains the entire understanding of the parties hereto with respect to the subject matter hereof and may be modified only by an instrument executed by the party sought to be charged.

- 11. **GOVERNING LAW**. This Stock Option Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, excluding choice of law rules thereof.
- 12. **EXECUTION IN COUNTERPARTS**. This Stock Option Agreement may be executed in counterparts, each of which shall be deemed to be an original, but both of which together shall constitute one and the same instrument.
  - 13. FACSIMILE SIGNATURES. Signatures hereon which are transmitted via facsimile, or other electronic image, shall be deemed original signatures.
- 14. <u>INTERPRETATION</u>; <u>HEADINGS</u>. The provisions of this Stock Option Agreement shall be interpreted in a reasonable manner to give effect to the intent of the parties hereto. The headings and captions under sections and paragraphs of this Stock Option Agreement are for convenience of reference only and do not in any way modify, interpret or construe the intent of the parties or affect any of the provisions of this Stock Option Agreement.

[Remainder of page intentionally left blank; signature page follows]

IN WITNESS WHEREOF, the parties have executed this Stock Option Agreement as of the day and year first above written.	
BIORESTORATIVE THERAPIES, INC.	
By: Name: Mark Weinreb Title: Chief Executive Officer	
Signature of Optionee	
Name of Optionee	
4	

STOCK OPTION AGREEMENT, made as of the 10<sup>th</sup> day of June, 2016, between **BIORESTORATIVE THERAPIES**, **INC.**, a Delaware corporation (the "Company"), and **MARK WEINREB** (the "Optionee").

WHEREAS, the Optionee serves as the Chief Executive Officer and Chairman of the Board of the Company;

WHEREAS, the Company desires to provide to the Optionee an additional incentive to promote the success of the Company;

WHEREAS, the Company and the Optionee are parties to an Executive Employment Agreement dated as of March 9, 2015 (the "Employment Agreement"); and

WHEREAS, capitalized terms used but not defined herein shall have the respective meanings ascribed thereto in the Employment Agreement.

NOW, THEREFORE, in consideration of the foregoing, the Company hereby grants to the Optionee the right and option to purchase shares of Common Stock of the Company under and pursuant to the terms and conditions of the Company's 2010 Equity Participation Plan (the "Plan") and upon and subject to the following terms and conditions:

- 1. **GRANT OF OPTION**. The Company hereby grants to the Optionee the right and option (the "Option") to purchase up to Two Hundred Seventy-Five Thousand (275,000) shares of Common Stock of the Company (the "Option Shares") during the following periods:
- (a) All or any part of Ninety-One Thousand Six Hundred Sixty-Seven (91,667) shares of Common Stock may be purchased during the period commencing on the date hereof and terminating at 5:00 P.M. on June 10, 2026 (the "Expiration Date").
- (b) All or any part of Ninety-One Thousand Six Hundred Sixty-Seven (91,667) shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2017 and terminating at 5:00 P.M. on the Expiration Date.
- (c) All or any part of Ninety-One Thousand Six Hundred Sixty-Six (91,666) shares of Common Stock may be purchased during the period commencing at 12:01 A.M. on June 10, 2018 and terminating at 5:00 P.M. on the Expiration Date.

Notwithstanding the foregoing, (i) in the event that the Optionee's employment with the Company is terminated by the Company Without Cause or by the Optionee for Good Reason (whether following a Change in Control or otherwise) or (ii) in the event that the Optionee's employment with the Company is not terminated by the Company on or prior to the Expiration Date of the Employment Agreement, and the Optionee does not resign his employment on or prior to the Expiration Date of the Employment Agreement, the Company and the Optionee, for any reason, do not enter into an agreement to extend the term of the Employment Agreement (whether on modified terms or otherwise) or enter into a new employment agreement, and, within three (3) months following the Expiration Date of the Employment Agreement, there is a termination of employment Without Cause or the Optionee resigns his employment for any reason, and, on the date of termination of employment, any portion of the Option is not exercisable, such unexercisable portion of the Option shall become exercisable (an "Option Acceleration Event").

- 2. NATURE OF OPTION. The Option is not intended to meet the requirements of Section 422 of the Internal Revenue Code of 1986, as amended, relating to "incentive stock options".
- 3. EXERCISE PRICE. The exercise price of each of the Option Shares shall be Three Dollars and Seventy-Three Cents (\$3.73) (the "Exercise Price"). The Company shall pay all original issue or transfer taxes on the exercise of the Option.
- 4. **EXERCISE OF OPTIONS**. (a) The Option shall be exercised in accordance with the provisions of the Plan. As soon as practicable after the receipt of notice of exercise and payment of the Exercise Price as provided for in the Plan, the Company shall tender to the Optionee a certificate issued in the Optionee's name evidencing the number of Option Shares covered thereby.
- (b) The Company agrees that, as contemplated in Section 13(b) of the Plan, the Optionee may elect to have the Company reduce the number of Option Shares otherwise issuable by a number of Option Shares having a Fair Market Value (as defined in the Plan) equal to the exercise price of the Option being exercised. In the event of such election, the Company shall issue to the Optionee a number of Option Shares computed using the following formula:

$$X = \underbrace{Y(A-B)}_{A}$$

Where X = the number of Option Shares to be issued to the Optionee

Y = the number of Option Shares subject to this Option (or the portion there of being cancelled)

A = the Fair Market Value of one Option Share

B = the Exercise Price

- 5. **TRANSFERABILITY**. The Option shall not be transferable other than by will or the laws of descent and distribution and, during the Optionee's lifetime, shall not be exercisable by any person other than the Optionee.
- 6. **TERMINATION OF EMPLOYMENT**. To the extent the Option becomes exercisable, the Option shall remain exercisable until the Expiration Date notwithstanding any subsequent termination of employment with the Company or its subsidiaries for any reason whatsoever. In addition, in the event of an Option Acceleration Event, the Option shall remain exercisable until the Expiration Date notwithstanding any termination of employment with the Company or its subsidiaries for any reason whatsoever.
  - 7. INCORPORATION BY REFERENCE. The terms and conditions of the Plan are hereby incorporated by reference and made a part hereof.

- 8. NOTICES. Any notice or other communication given hereunder shall be deemed sufficient if in writing and hand delivered or sent by registered or certified mail, return receipt requested, addressed to the Company, 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Vice President of Operations, and to the Optionee at the address indicated below. Notices shall be deemed to have been given on the date of hand delivery or mailing, except notices of change of address, which shall be deemed to have been given when received.
- 9. **BINDING EFFECT**. This Stock Option Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective legal representatives, successors and assigns.
- 10. **ENTIRE AGREEMENT**. This Stock Option Agreement, together with the Plan, contains the entire understanding of the parties hereto with respect to the subject matter hereof and may be modified only by an instrument executed by the party sought to be charged.
- 11. **GOVERNING LAW**. This Stock Option Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, excluding choice of law rules thereof.
- 12. **EXECUTION IN COUNTERPARTS**. This Stock Option Agreement may be executed in counterparts, each of which shall be deemed to be an original, but both of which together shall constitute one and the same instrument.
  - 13. FACSIMILE SIGNATURES. Signatures hereon which are transmitted via facsimile, or other electronic image, shall be deemed original signatures.
- 14. <u>INTERPRETATION</u>; <u>HEADINGS</u>. The provisions of this Stock Option Agreement shall be interpreted in a reasonable manner to give effect to the intent of the parties hereto. The headings and captions under sections and paragraphs of this Stock Option Agreement are for convenience of reference only and do not in any way modify, interpret or construe the intent of the parties or affect any of the provisions of this Stock Option Agreement.

[Signature page follows]

IN WITNESS WHEREOF, the parties have executed this Stock Option Agreement as	s of the day and year first above written.
BIOI	RESTORATIVE THERAPIES, INC.
By:	
Name	E: Mandy Clyde
Title:	Vice President of Operations
Signa	ture of Optionee
Mark	Weinreb
Name	e of Optionee

40 Marcus Drive Melville, NY 11747 Address of Optionee

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THIS PROMISSORY NOTE HAS BEEN ACQUIRED FOR INVESTMENT PURPOSES ONLY AND NOT FOR DISTRIBUTION AND MAY BE TRANSFERRED OR OTHERWISE DISPOSED OF ONLY IN COMPLIANCE WITH THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT").

### BIORESTORATIVE THERAPIES, INC.

June 30, 2016

#### PROMISSORY NOTE

**DUE July 1, 2017** 

BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), for value received, hereby promises to pay to TUXIS TRUST, (the "Holder") on July 1, 2017 (the "Maturity Date") at the offices of the Company, 40 Marcus Drive, Suite One, Melville, New York, 11747, the principal sum of FIVE HUNDRED THOUSAND (\$500,000) in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts and to pay interest on said principal sum at the rate of ten percent (10%) per annum through the Maturity Date. Interest on the principal balance of this Promissory Note ("Note") from the date hereof shall be payable on the Maturity Date.

- 1. Registered Owner. The Company may consider and treat the person in whose name this Note shall be registered as the absolute owner thereof for all purposes whatsoever (whether or not this Note shall be overdue) and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Note shall have the right to transfer it by assignment and the transferee thereof, upon its registration as owner of this Note, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Note to the Company at its offices together with the Note Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of its address, and shall submit appropriate evidence regarding the transfer so that this Note may be registered in the name of the transferee. This Note is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Note not registered at the time of sending the communication.
- 2. <u>Prepayment Right</u>. The Company may, at its option, at any time and from time to time, prepay all or any part of the principal balance of this Note, without penalty or premium, provided that, concurrently with each such prepayment, the Company shall pay accrued and unpaid interest on the principal so prepaid to the date of such prepayment.
- 3. <u>Prepayment Obligation</u>. (a) In the event that, prior to the Maturity Date, the Company receives net proceeds of ten million dollars (\$10,000,000) from a single equity or debt financing (as opposed to a series of related or unrelated financings), the Holder shall have the right, upon written notice to the Company, to demand that the principal amount of this Note, together with accrued interest thereon, be forthwith due and payable whereupon the same shall become forthwith due and payable.

- (b) Notwithstanding the provisions of paragraph (a) hereof, the Company's obligation to pay the amounts provided for therein shall be subject to the written consent of the person or entity, or group of persons and/or entities, that provided the particular financing.
- 4. Events of Default. If the Company shall (a) fail to make any payment due hereunder and such failure shall continue unremedied for a period of fifteen (15) days following receipt of written notice thereof from the Holder; (b) admit in writing its inability to pay its debts generally as they mature; (c) make a general assignment for the benefit of creditors; (d) be adjudicated a bankrupt or insolvent; (e) file a voluntary petition in bankruptcy or a petition or an answer seeking an arrangement with creditors; (f) take advantage of any bankruptcy, insolvency or readjustment of debt law or statute or file an answer admitting the material allegations of a petition filed against it in any proceeding under any such law; (g) apply for or consent to the appointment of a receiver, trustee or liquidator for all or substantially all of its assets; or (h) have an involuntary case commenced against it under the Federal bankruptcy laws, which case is not dismissed or stayed within sixty (60) days (each an "Event of Default"), then, at any time thereafter and unless such Event of Default shall have been cured or shall have been waived in writing by the Holder, the Holder may, by written notice to the Company, declare the entire unpaid principal amount of this Note then outstanding, together with accrued interest thereon, to be forthwith due and payable, whereupon the same shall become forthwith due and payable.
- 5. <u>Investment Intent</u>. The Holder, by its acceptance hereof, hereby represents and warrants that this Note is being acquired for investment purposes only and without a view to the distribution thereof, and may be transferred only in compliance with the Act.
- 6. <u>Transfer to Comply with the Securities Act of 1933</u>. This Note may not be sold or otherwise disposed of except as follows: (a) to a person or entity to whom this Note may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto; or (b) to any person or entity upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale or disposition, and thereafter to all successive assignees.
- 7. Applicable Law. This Note is issued under and shall for all purposes be governed by and construed in accordance with the laws of the State of New York, excluding choice of law rules thereof.
- 8. Notices. Any notice required or permitted to be given pursuant to this Note shall be deemed to have been duly given when delivered by hand or sent by certified or registered mail, return receipt requested and postage prepaid, overnight mail or courier or telecopier as follows:

If to the Holder:

26 Deer Creek Lane Mt. Kisco, NY 10549 Facsimile No.:

If to the Company:

40 Marcus Drive

Suite One Melville, New York 11747 Attn: Chief Executive Officer Facsimile No.: (631) 760-8414

With a copy to:

Certilman Balin Adler & Hyman, LLP 90 Merrick Avenue East Meadow, New York 11554 Attn: Fred Skolnik, Esq. Facsimile No.: (516) 296-7111

or at such other address as the Holder or the Company shall designate by notice to the other given in accordance with this Section 8.

9. <u>Miscellaneous</u>. This Note evidences the entire obligation of the Company with respect to the repayment of the principal amount hereof and the other matters provided for herein. No provision of this Note may be modified except by an instrument in writing signed by the Company and the Holder. Payment of principal and interest due under this Note prior to the Maturity Date shall be made to the registered Holder of this Note. Payment of principal and interest due upon maturity shall be made to the registered Holder of this Note on or after the Maturity Date contemporaneous with and upon presentation of this Note for payment. No interest shall be due on this Note for such period of time that may elapse between the Maturity Date and its presentation for payment.

IN WITNESS WHERE	F, the Company has caused this Note to be signed on its behalf, in its corporate name, by its duly authorized officer, all as of the day	and
year first above written.		

BIORESTORATIVE THERAPIES, INC.

Bv:

Mark Weinreb, Chief Executive Officer

## BIORESTORATIVE THERAPIES, INC.

## PROMISSORY NOTE

**DUE JULY 1, 2017** 

## NOTE ASSIGNMENT FORM

## FOR VALUE RECEIVED

The undersigned	(please print or typewrite name of assignor) hereby sells, assigns and transfers unto				
4 1 11 1	payer identification number, if any, of assignee) the within Promissory Note of BioRestorative Therapies, Inc. and hereby authorizes the Company to transfer this Note on its books.				
If the Holder is an individual:	If the Holder is not an individual:				
Name(s) of Holder	Name of Holder				
	By:				
Signature of Holder	Signature of Authorized Representative				
Signature, if jointly held	Name and Title of Authorized				
	Representative				
Date	Date				
•	(Signature(s) guaranteed)				

### VOID AFTER 5:00 P.M., EASTERN TIME, ON JUNE 30, 2021

NEITHER THIS WARRANT NOR THE WARRANT STOCK (AS HEREINAFTER DEFINED) HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE. THIS WARRANT AND THE WARRANT STOCK MAY BE TRANSFERRED ONLY IN COMPLIANCE WITH THE ACT AND SUCH LAWS. THIS LEGEND SHALL BE ENDORSED UPON ANY WARRANT ISSUED IN EXCHANGE FOR THIS WARRANT.

### BIORESTORATIVE THERAPIES, INC.

(Incorporated under the laws of the State of Delaware)

#### Warrant

40,000 Shares June 30, 2016

FOR VALUE RECEIVED, BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), hereby certifies that TUXIS TRUST\_(the "Holder") is entitled, subject to the provisions of this Warrant, to purchase from the Company up to FORTY THOUSAND (40,000) SHARES OF COMMON STOCK, \$.001 par value per share, of the Company ("Common Shares") at a price of FOUR DOLLARS (\$4.00) per share (the "Exercise Price") during the period commencing on the date hereof and terminating at 5:00 P.M. on the fifth anniversary of the date hereof.

The number of Common Shares to be received upon the exercise of this Warrant may be adjusted from time to time as hereinafter set forth. The Common Shares deliverable upon such exercise, and as adjusted from time to time, are hereinafter sometimes referred to as "Warrant Stock."

The Holder agrees with the Company that this Warrant is issued, and all the rights hereunder shall be held subject to, all of the conditions, limitations and provisions set forth herein.

1. Exercise of Warrant. This Warrant may be exercised by its presentation and surrender to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747 (or such office or agency of the Company as it may designate in writing to the Holder hereof) with the Warrant Exercise Form attached hereto duly executed and accompanied by payment (either in cash or by official bank check, payable to the order of the Company) of the Exercise Price for the number of shares specified in such Form. The Company agrees that the Holder hereof shall be deemed the record owner of such Common Shares as of the close of business on the date on which this Warrant shall have been presented and payment made for such Common Shares as aforesaid whether or not the Company or its transfer agent is open for business. Certificates for the Common Shares so purchased shall be delivered to the Holder hereof within a reasonable time after the rights represented by this Warrant shall have been so exercised. If this Warrant is exercised in part only, the Company shall, upon surrender of this Warrant for cancellation, execute and deliver a new Warrant evidencing the rights of the Holder hereof to purchase the balance of the shares purchasable hereunder.

- 2. Registered Owner. The Company may consider and treat the person in whose name this Warrant shall be registered as the absolute owner thereof for all purposes whatsoever and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Warrant shall have the right to transfer it by assignment and the transferee thereof, upon his registration as owner of this Warrant, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Warrant to the Company at its offices together with the Warrant Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of his address, and shall submit appropriate evidence regarding the transfer so that this Warrant may be registered in the name of the transferee. This Warrant is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Warrant not registered at the time of sending the communication.
- 3. Reservation of Shares. During the period within which the rights represented by this Warrant may be exercised, the Company shall, at all times, reserve and keep available out of its authorized capital stock, solely for the purposes of issuance upon exercise of this Warrant, such number of its Common Shares as shall be issuable upon the exercise of this Warrant; and if at any time the number of authorized Common Shares shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action as may be necessary to increase its authorized but unissued Common Shares to such number of shares as shall be sufficient for such purpose; the Company shall have analogous obligations with respect to any other securities or property issuable upon exercise of this Warrant.
- 4. <u>Fractional Shares</u>. The Company shall not be required to issue certificates representing fractions of Common Shares, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the Company and the Holder that all fractional interests shall be eliminated.
- 5. **Rights of the Holder**. The Holder shall not, by virtue hereof, be entitled to any voting or other rights of a stockholder of the Company, either at law or in equity, and the rights of the Holder are limited to those expressed in this Warrant.

## 6. Anti-Dilution Provisions.

- 6.1 Adjustments for Stock Dividends; Combinations, Etc. (a) In case the Company shall do any of the following (an "Event"):
  - (i) declare a dividend or other distribution on its Common Shares payable in Common Shares of the Company,
  - (ii) subdivide the outstanding Common Shares pursuant to a stock split or otherwise,
  - (iii) combine the outstanding Common Shares into a smaller number of shares pursuant to a reverse split or otherwise, or
  - (iv) reclassify its Common Shares,

then the Exercise Price in effect at the time of the record date for such dividend or other distribution or of the effective date of such subdivision, combination or reclassification shall be changed to a price determined by dividing (a) the product of the number of Common Shares outstanding immediately prior to such Event, multiplied by the Exercise Price in effect immediately prior to such Event by (b) the number of Common Shares outstanding immediately after such Event. Each such adjustment of the Exercise Price shall be calculated to the nearest one-hundredth of a cent. Such adjustment shall be made successively whenever any Event listed above shall occur.

- (b) Whenever the Exercise Price is adjusted as set forth in Section 6.1 (whether or not the Company then or thereafter elects to issue additional Warrants in substitution for an adjustment in the number of shares of Warrant Stock), the number of shares of Warrant Stock specified in each Warrant which the Holder may purchase shall be adjusted, to the nearest full share, by multiplying such number of shares of Warrant Stock immediately prior to such adjustment by a fraction, of which the numerator shall be the Exercise Price immediately prior to such adjustment and the denominator shall be the Exercise Price immediately thereafter.
- 6.2 Adjustment for Reorganization, Consolidation or Merger. In case of any reorganization of the Company (or any other entity, the securities of which are at the time receivable on the exercise of this Warrant) after the date hereof or in case after such date the Company (or any such other entity) shall consolidate with or merge with or into another entity, then, and in each such case, the Holder of this Warrant upon the exercise thereof as provided in Section I at any time after the consummation of such reorganization, consolidation or merger, shall be entitled to receive, in lieu of the securities and property receivable upon the exercise of this Warrant prior to such consummation, the securities or property to which such Holder would have been entitled upon such consummation if such Holder had exercised this Warrant immediately prior thereto, all subject to further adjustment as provided in Section 6.I; in each such case, the terms of this Warrant shall be applicable to the securities or property receivable upon the exercise of this Warrant after such consummation.
- 7. <u>Investment Intent</u>. Unless, prior to the exercise of this Warrant, the issuance of the Warrant Stock has been registered with the Securities and Exchange Commission pursuant to the Act, the Warrant Exercise Form shall be accompanied by the Investment Representation Letter attached hereto, duly executed by the Holder.

## 8. Restrictions on Transfer.

8.1 Transfer to Comply with the Securities Act of 1933. Neither this Warrant nor any Warrant Stock may be sold, assigned, transferred or otherwise disposed of except as follows: (1) to a person who, in the opinion of counsel satisfactory to the Company, is a person to whom this Warrant or the Warrant Stock may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto and then only against receipt of an agreement of such person to comply with the provisions of this Section 8 with respect to any resale, assignment, transfer or other disposition of such securities; or (2) to any person upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale, assignment, transfer or disposition.

8.2 <u>Legend</u>. Subject to the terms hereof, upon exercise of this Warrant and the issuance of the Warrant Stock, all certificates representing such Warrant Stock shall bear on the face or reverse thereof substantially the following legend:

"The securities which are represented by this certificate have not been registered under the Securities Act of 1933, and may not be sold, transferred, hypothecated or otherwise disposed of until a registration statement with respect thereto is declared effective under such act, or the Company receives an opinion of counsel for the Company that an exemption from the registration requirements of such act is available."

- 9. <u>Lost, Stolen or Destroyed Warrant</u>. In the event that the Holder notifies the Company that this Warrant has been lost, stolen or destroyed and provides (a) a letter, in form satisfactory to the Company, to the effect that it will indemnify the Company from any loss incurred by it in connection therewith, and/or (b) an indemnity bond in such amount as is reasonably required by the Company, the Company having the option of electing either (a) or (b) or both, the Company may, in its sole discretion, accept such letter and/or indemnity bond in lieu of the surrender of this Warrant as required by Section 1 hereof.
- 10. Notices. All notices required hereunder shall be given by first-class mail, postage prepaid, or overnight mail or courier and, if given by the Holder addressed to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Chief Executive Officer, or such other address as the Company may designate in writing to the Holder; and if given by the Company, addressed to the Holder at the address of the Holder shown on the books of the Company.
- 11. <u>Applicable Law; Jurisdiction</u>. This Warrant is issued under, and shall for all purposes be governed by and construed in accordance with, the laws of the State of Delaware, excluding choice of law principles thereof. The Company and, by its acceptance of this Warrant, the Holder hereby irrevocably consent and submit to the exclusive jurisdiction of any federal or state court located within Nassau County, New York over any dispute arising out of or relating to this Warrant and each party hereby irrevocably agrees that all claims in respect of such dispute or any legal action related thereto may be heard and determined in such courts. Each of the Company and the Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any objection that it or he may now or hereafter have to the laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute.

[Remainder of page intentionally left blank. Signature page follows.]

year first above written.	led on its benair, in its corporate name, by its duly authorized officer, all as of the day an
	BIORESTORATIVE THERAPIES, INC.
	Ву:
	Mark Weinreb

Chief Executive Officer

# WARRANT EXERCISE FORM

The undersigned hereby irrevocably elects to exercise the within War of <b>BIORESTORATIVE THERAPIES</b> , <b>INC</b> . The undersigned hereby m		of Common Stock
TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER	
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]	
Signature of Holder	By: Authorized Signatory	
Signature of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]	
Address(es) of Holder(s)	Address of Holder	
Social Security Number(s) of Holder(s)	Tax Identification Number of Holder	
Date	Date	

# WARRANT ASSIGNMENT FORM

FOR VALUE RECEIVED,	hereby sells, assigns and transfers unto (please type or print name of		
assignee) with an address at	the right to purchase shares of Common Stock of		
BIORESTORATIVE THERAPIES, INC. (the "Compa	any") represented by this Warrant dated as of June 30, 2016 to the extent of shares and does hereby		
irrevocably constitute and appoint	attorney to transfer the same on the books of the Company with full power of substitution in the premises.		
TO BE COMPLETED BY INDIVIDUAL	TO BE COMPLETED BY CORPORATE,		
HOLDER, JOINT TENANTS, TENANTS	PARTNERSHIP, LIMITED LIABILITY		
IN COMMON OR AS HOLDERS OF	COMPANY OR TRUST HOLDER		
COMMUNITY PROPERTY			
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]		
	Pro-		
27 11	By:		
Signature of Holder	Authorized Signatory		
Signature of Holder, if jointly held	Name and Title of Authorized Signatory		
Signature of Holder, if Jointry field	[Please Print]		
	[Flease Filme]		
Date	Date		
Dute	Date		
	Signature(s) Guaranteed:		

## FORM OF INVESTMENT REPRESENTATION LETTER

BioRestorative Therapies, Inc. 40 Marcus Drive Suite One Melville, New York 11747

emen

In connection with the acquisition of	shares of Common Stock (the "Shares") of BIORESTORATIVE THERAPIES, INC., a Delawar
corporation (the "Company"), by the undersigned from the Compan	ny pursuant to the exercise of a Warrant, dated as of June 30, 2016, the undersigned does hereby represen
and warrant to the Company as follows:	

- (a) The undersigned represents and warrants that the Shares acquired by it are being acquired for its own account, for investment purposes and not with a view to any distribution within the meaning of the Securities Act of 1933, as amended (the "Securities Act"). The undersigned will not sell, assign, mortgage, pledge, hypothecate, transfer or otherwise dispose of any of the Shares unless (i) a registration statement under the Securities Act with respect thereto is in effect and the prospectus included therein meets the requirements of Section 10 of the Securities Act, or (ii) the Company has received a written opinion of its counsel that, after an investigation of the relevant facts, such counsel is of the opinion that such proposed sale, assignment, mortgage, pledge, hypothecation, transfer or disposition does not require registration under the Securities Act or any state securities law.
- (b) The undersigned understands that the resale of the Shares is not, and is not being, registered under the Securities Act and the Shares must be held indefinitely unless they are subsequently registered thereunder or an exemption from such registration is available.
- (c) The undersigned recognizes that the acquisition of the Shares involves a high degree of risk and is suitable only for persons of adequate financial means who have no need for liquidity with respect to the Shares in that (a) it may not be able to liquidate the Shares in the event of emergency; (b) transferability is extremely limited; and (c) it could sustain a complete loss of its investment.
- (d) The undersigned represents and warrants that it (a) is competent to understand and does understand the nature of its investment; and (b) is able to bear the economic risk of an acquisition of the Shares.

- (e) The undersigned represents and warrants that it is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act. The undersigned meets the requirements of at least one of the suitability standards for an "accredited investor" as set forth on the Accredited Investor Certification attached hereto.
- (f) The undersigned has reviewed the Company's filings with the Securities and Exchange Commission, including the risk factors set forth therein, and has been afforded the opportunity to obtain such information regarding the Company as it has reasonably requested to evaluate the merits and risks of the undersigned's investment in the Shares. No oral or written representations have been made or oral information furnished to the undersigned or its advisers in connection with the investment in the Shares.
- (g) The undersigned confirms that the representations and warranties set forth in the Subscription Agreement pursuant to which the Warrant was issued are true and correct as of the date hereof as if made on and as of the date hereof with respect to the purchase of the Shares.
- (h) The undersigned acknowledges that counsel to the Company will be relying, and may rely, upon the foregoing in connection with any opinion of counsel it may give with regard to the issuance of the Shares by the Company to the undersigned, and any subsequent transfer of the Shares by the undersigned, and agrees to advise the Company and its counsel in writing in the event of any change in any of the foregoing.

Very truly yours,

TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]
	By:
Signature of Holder	Authorized Signatory
Signature of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]
Date	Date

## WARRANT EXERCISE

Accredited Investor Certification (Initial the appropriate box(es))

The undersigned represents and warrants that it, he or she is an "accredited investor" based upon the satisfaction of one or more of the following criteria:
 (1) he or she is a natural person who has a net worth or joint net worth with his or her spouse in excess of \$1,000,000 at the time of his or her purchase 1; or
 (2) he or she is a natural person who had an individual income in excess of \$200,000 in each of the two most recent years or a joint income with his or her spouse in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year; or
 (3) he or she is a director or executive officer of the Company; or
(4) it is either (a) a bank as defined in Section 3(a)(2) of the Securities Act or a savings and loan association or other institution as defined in Section 3(a)(5)(A) of the Securities Act, whether acting in its individual or fiduciary capacity, (b) a broker or dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934, (c) an insurance company as defined in Section 2(13) of the Securities Act, (d) an investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a)(48) of such act, (e) a small business investment company licensed by the United States Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958, (f) a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000 or (g) an employee benefit plan within the meaning of Title I of the Employee Retirement Income Security Act of 1974, if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such act, which plan fiduciary is a bank, savings and loan association, an insurance company or a registered investment advisor, or if the employee benefit plan has total assets in excess of \$5,000,000 or, if a self-directed plan, with investment decisions made solely by persons who otherwise meet these suitability standards; or

# <sup>1</sup>For purposes of calculating net worth:

- (i) The undersigned's primary residence shall not be included as an asset;
- (ii) Indebtedness that is secured by the undersigned's primary residence, up to the estimated fair market value of the primary residence at the date hereof, shall not be included as a liability (except that if the amount of such indebtedness outstanding at the date hereof exceeds the amount outstanding 60 days before the date hereof, other than as a result of the acquisition of the primary residence, the amount of such excess shall be included as a liability); and
- (iii) Indebtedness that is secured by the undersigned's primary residence in excess of the estimated fair market value of the primary residence at the date hereof shall be included as a liability.

(5) it is a private hydroga development company of defined in Section 2020	a)(22) of the Investment Advisors Act of 1040; or
(5) it is a private business development company as defined in Section 202(	a)(22) of the investment Advisers Act of 1940, of
(6) it is an organization described in Section 501(c)(3) of the Internal Rever a partnership not formed for the specific purpose of acquiring the Shares of	nue Code of 1986, as amended, a corporation, a Massachusetts or similar business trust of fered hereby, with total assets in excess of \$5,000,000; or
	e specific purpose of acquiring the Shares, whose purchase is directed by a sophisticated smatters that he or she is capable of evaluating the merits and risks of the prospective
(8) it is a corporation, partnership or other entity, and each and every equ which it, he or she certifies that it, he or she meets the qualifications set fort	uity owner of such entity initials a separate Accredited Investor Certification pursuant to the in either (1), (2), (3), (4), (5), (6) or (7) above.
If the Warrant Holder is an INDIVIDUAL, or if the Shares are being acquired as JOINT TENANTS, as TENANTS IN COMMON, or as COMMUNITY PROPERTY:	If the Warrant Holder is a PARTNERSHIP, CORPORATION, LIMITED LIABILITY COMPANY or TRUST:
Name(s) of Warrant Holder	Name of Warrant Holder
``	Ву:
Signature of Warrant Holder	Signature of Authorized Representative
Signature, if jointly held	Name and Title of Authorized Representative
Date	Date

THIS PROMISSORY NOTE HAS BEEN ACQUIRED FOR INVESTMENT PURPOSES ONLY AND NOT FOR DISTRIBUTION AND MAY BE TRANSFERRED OR OTHERWISE DISPOSED OF ONLY IN COMPLIANCE WITH THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT").

## BIORESTORATIVE THERAPIES, INC.

## **AUGUST 5, 2016**

#### PROMISSORY NOTE

### **DUE FEBRUARY 5, 2017**

BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), for value received, hereby promises to pay to ROBERT B. CATELL (the "Holder") on February 5, 2017 (the "Maturity Date") at the offices of the Company, 40 Marcus Drive, Suite One, Melville, New York, 11747, the principal sum of ONE HUNDRED THOUSAND (\$100,000) in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts and to pay interest on said principal sum at the rate of ten percent (10%) per annum through the Maturity Date. Interest on the principal balance of this Promissory Note ("Note") from the date hereof shall be payable on the Maturity Date.

- 1. Registered Owner. The Company may consider and treat the person in whose name this Note shall be registered as the absolute owner thereof for all purposes whatsoever (whether or not this Note shall be overdue) and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Note shall have the right to transfer it by assignment and the transferee thereof, upon its registration as owner of this Note, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Note to the Company at its offices together with the Note Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of its address, and shall submit appropriate evidence regarding the transfer so that this Note may be registered in the name of the transferee. This Note is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Note not registered at the time of sending the communication.
- 2. <u>Prepayment Right</u>. The Company may, at its option, at any time and from time to time, prepay all or any part of the principal balance of this Note, without penalty or premium, provided that, concurrently with each such prepayment, the Company shall pay accrued and unpaid interest on the principal so prepaid to the date of such prepayment.
- 3. <u>Prepayment Obligation</u>. (a) In the event that, prior to the Maturity Date, the Company receives net proceeds of ten million dollars (\$10,000,000) from a single equity or debt financing (as opposed to a series of related or unrelated financings), the Holder shall have the right, upon written notice to the Company, to demand that the principal amount of this Note, together with accrued interest thereon, be forthwith due and payable whereupon the same shall become forthwith due and payable.

- (b) Notwithstanding the provisions of paragraph (a) hereof, the Company's obligation to pay the amounts provided for therein shall be subject to the written consent of the person or entity, or group of persons and/or entities, that provided the particular financing.
- 4. Events of Default. If the Company shall (a) fail to make any payment due hereunder and such failure shall continue unremedied for a period of fifteen (15) days following receipt of written notice thereof from the Holder; (b) admit in writing its inability to pay its debts generally as they mature; (c) make a general assignment for the benefit of creditors; (d) be adjudicated a bankrupt or insolvent; (e) file a voluntary petition in bankruptcy or a petition or an answer seeking an arrangement with creditors; (f) take advantage of any bankruptcy, insolvency or readjustment of debt law or statute or file an answer admitting the material allegations of a petition filed against it in any proceeding under any such law; (g) apply for or consent to the appointment of a receiver, trustee or liquidator for all or substantially all of its assets; or (h) have an involuntary case commenced against it under the Federal bankruptcy laws, which case is not dismissed or stayed within sixty (60) days (each an "Event of Default"), then, at any time thereafter and unless such Event of Default shall have been cured or shall have been waived in writing by the Holder, the Holder may, by written notice to the Company, declare the entire unpaid principal amount of this Note then outstanding, together with accrued interest thereon, to be forthwith due and payable, whereupon the same shall become forthwith due and payable.
- 5. <u>Investment Intent</u>. The Holder, by its acceptance hereof, hereby represents and warrants that this Note is being acquired for investment purposes only and without a view to the distribution thereof, and may be transferred only in compliance with the Act.
- 6. <u>Transfer to Comply with the Securities Act of 1933</u>. This Note may not be sold or otherwise disposed of except as follows: (a) to a person or entity to whom this Note may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto; or (b) to any person or entity upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale or disposition, and thereafter to all successive assignees.
- 7. Applicable Law. This Note is issued under and shall for all purposes be governed by and construed in accordance with the laws of the State of New York, excluding choice of law rules thereof.
- 8. Notices. Any notice required or permitted to be given pursuant to this Note shall be deemed to have been duly given when delivered by hand or sent by certified or registered mail, return receipt requested and postage prepaid, overnight mail or courier or telecopier as follows:

If to the Holder:

62 Osborne Road Garden City, New York 11530 If to the Company:

40 Marcus Drive Suite One Melville, New York 11747 Attn: Chief Executive Officer Facsimile No.: (631) 760-8414

With a copy to:

Certilman Balin Adler & Hyman, LLP 90 Merrick Avenue East Meadow, New York 11554 Attn: Fred Skolnik, Esq. Facsimile No.: (516) 296-7111

or at such other address as the Holder or the Company shall designate by notice to the other given in accordance with this Section 8.

9. <u>Miscellaneous</u>. This Note evidences the entire obligation of the Company with respect to the repayment of the principal amount hereof and the other matters provided for herein. No provision of this Note may be modified except by an instrument in writing signed by the Company and the Holder. Payment of principal and interest due under this Note prior to the Maturity Date shall be made to the registered Holder of this Note. Payment of principal and interest due upon maturity shall be made to the registered Holder of this Note on or after the Maturity Date contemporaneous with and upon presentation of this Note for payment. No interest shall be due on this Note for such period of time that may elapse between the Maturity Date and its presentation for payment.

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Note to be signed or	n its behalf, in its corporate name, by its duly authorized officer, all as of the day and
year first above written.	
n	NODESTODATIVE THERABLES INC
В	SIORESTORATIVE THERAPIES, INC.

By:

Mark Weinreb, Chief Executive Officer

# PROMISSORY NOTE

# **DUE FEBRUARY 5, 2017**

# NOTE ASSIGNMENT FORM

## FOR VALUE RECEIVED

The undersigned	(please print or typewrite name of assignor) hereby sells, assigns and transfers unto
4 1 11 /	expayer identification number, if any, of assignee) the within Promissory Note of BioRestorative Therapies, Inc. 00 and hereby authorizes the Company to transfer this Note on its books.
If the Holder is an individual:	If the Holder is not an individual:
Name(s) of Holder	Name of Holder
	Ву:
Signature of Holder	Signature of Authorized Representative
Signature, if jointly held	Name and Title of Authorized Representative
Date	Date
_	(Signature(s) guaranteed)
	2

### VOID AFTER 5:00 P.M., EASTERN TIME, ON AUGUST 5, 2021

NEITHER THIS WARRANT NOR THE WARRANT STOCK (AS HEREINAFTER DEFINED) HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE. THIS WARRANT AND THE WARRANT STOCK MAY BE TRANSFERRED ONLY IN COMPLIANCE WITH THE ACT AND SUCH LAWS. THIS LEGEND SHALL BE ENDORSED UPON ANY WARRANT ISSUED IN EXCHANGE FOR THIS WARRANT.

### BIORESTORATIVE THERAPIES, INC.

(Incorporated under the laws of the State of Delaware)

#### Warrant

8,000 Shares August 5, 2016

FOR VALUE RECEIVED, BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), hereby certifies that ROBERT B. CATELL (the "Holder") is entitled, subject to the provisions of this Warrant, to purchase from the Company up to EIGHT THOUSAND (8,000) SHARES OF COMMON STOCK, \$.001 par value per share, of the Company ("Common Shares") at a price of FOUR DOLLARS (\$4.00) per share (the "Exercise Price") during the period commencing on the date hereof and terminating at 5:00 P.M. on the fifth anniversary of the date hereof.

The number of Common Shares to be received upon the exercise of this Warrant may be adjusted from time to time as hereinafter set forth. The Common Shares deliverable upon such exercise, and as adjusted from time to time, are hereinafter sometimes referred to as "Warrant Stock."

The Holder agrees with the Company that this Warrant is issued, and all the rights hereunder shall be held subject to, all of the conditions, limitations and provisions set forth herein.

1. Exercise of Warrant. This Warrant may be exercised by its presentation and surrender to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747 (or such office or agency of the Company as it may designate in writing to the Holder hereof) with the Warrant Exercise Form attached hereto duly executed and accompanied by payment (either in cash or by official bank check, payable to the order of the Company) of the Exercise Price for the number of shares specified in such Form. The Company agrees that the Holder hereof shall be deemed the record owner of such Common Shares as of the close of business on the date on which this Warrant shall have been presented and payment made for such Common Shares as aforesaid whether or not the Company or its transfer agent is open for business. Certificates for the Common Shares so purchased shall be delivered to the Holder hereof within a reasonable time after the rights represented by this Warrant shall have been so exercised. If this Warrant is exercised in part only, the Company shall, upon surrender of this Warrant for cancellation, execute and deliver a new Warrant evidencing the rights of the Holder hereof to purchase the balance of the shares purchasable hereunder.

- 2. Registered Owner. The Company may consider and treat the person in whose name this Warrant shall be registered as the absolute owner thereof for all purposes whatsoever and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Warrant shall have the right to transfer it by assignment and the transferee thereof, upon his registration as owner of this Warrant, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Warrant to the Company at its offices together with the Warrant Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of his address, and shall submit appropriate evidence regarding the transfer so that this Warrant may be registered in the name of the transferee. This Warrant is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Warrant not registered at the time of sending the communication.
- 3. Reservation of Shares. During the period within which the rights represented by this Warrant may be exercised, the Company shall, at all times, reserve and keep available out of its authorized capital stock, solely for the purposes of issuance upon exercise of this Warrant, such number of its Common Shares as shall be issuable upon the exercise of this Warrant; and if at any time the number of authorized Common Shares shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action as may be necessary to increase its authorized but unissued Common Shares to such number of shares as shall be sufficient for such purpose; the Company shall have analogous obligations with respect to any other securities or property issuable upon exercise of this Warrant.
- 4. <u>Fractional Shares</u>. The Company shall not be required to issue certificates representing fractions of Common Shares, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the Company and the Holder that all fractional interests shall be eliminated.
- 5. **Rights of the Holder**. The Holder shall not, by virtue hereof, be entitled to any voting or other rights of a stockholder of the Company, either at law or in equity, and the rights of the Holder are limited to those expressed in this Warrant.

## 6. Anti-Dilution Provisions.

- 6.1 Adjustments for Stock Dividends; Combinations, Etc. (a) In case the Company shall do any of the following (an "Event"):
  - (i) declare a dividend or other distribution on its Common Shares payable in Common Shares of the Company,
  - (ii) subdivide the outstanding Common Shares pursuant to a stock split or otherwise,
  - (iii) combine the outstanding Common Shares into a smaller number of shares pursuant to a reverse split or otherwise, or

### (iv) reclassify its Common Shares,

then the Exercise Price in effect at the time of the record date for such dividend or other distribution or of the effective date of such subdivision, combination or reclassification shall be changed to a price determined by dividing (a) the product of the number of Common Shares outstanding immediately prior to such Event, multiplied by the Exercise Price in effect immediately prior to such Event by (b) the number of Common Shares outstanding immediately after such Event. Each such adjustment of the Exercise Price shall be calculated to the nearest one-hundredth of a cent. Such adjustment shall be made successively whenever any Event listed above shall occur.

- (b) Whenever the Exercise Price is adjusted as set forth in Section 6.1 (whether or not the Company then or thereafter elects to issue additional Warrants in substitution for an adjustment in the number of shares of Warrant Stock), the number of shares of Warrant Stock specified in each Warrant which the Holder may purchase shall be adjusted, to the nearest full share, by multiplying such number of shares of Warrant Stock immediately prior to such adjustment by a fraction, of which the numerator shall be the Exercise Price immediately prior to such adjustment and the denominator shall be the Exercise Price immediately thereafter.
- 6.2 Adjustment for Reorganization, Consolidation or Merger. In case of any reorganization of the Company (or any other entity, the securities of which are at the time receivable on the exercise of this Warrant) after the date hereof or in case after such date the Company (or any such other entity) shall consolidate with or merge with or into another entity, then, and in each such case, the Holder of this Warrant upon the exercise thereof as provided in Section 1 at any time after the consummation of such reorganization, consolidation or merger, shall be entitled to receive, in lieu of the securities and property receivable upon the exercise of this Warrant prior to such consummation, the securities or property to which such Holder would have been entitled upon such consummation if such Holder had exercised this Warrant immediately prior thereto, all subject to further adjustment as provided in Section 6.1; in each such case, the terms of this Warrant shall be applicable to the securities or property receivable upon the exercise of this Warrant after such consummation.
- 7. <u>Investment Intent</u>. Unless, prior to the exercise of this Warrant, the issuance of the Warrant Stock has been registered with the Securities and Exchange Commission pursuant to the Act, the Warrant Exercise Form shall be accompanied by the Investment Representation Letter attached hereto, duly executed by the Holder.

## 8. Restrictions on Transfer.

8.1 Transfer to Comply with the Securities Act of 1933. Neither this Warrant nor any Warrant Stock may be sold, assigned, transferred or otherwise disposed of except as follows: (1) to a person who, in the opinion of counsel satisfactory to the Company, is a person to whom this Warrant or the Warrant Stock may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto and then only against receipt of an agreement of such person to comply with the provisions of this Section 8 with respect to any resale, assignment, transfer or other disposition of such securities; or (2) to any person upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale, assignment, transfer or disposition.

8.2 <u>Legend</u>. Subject to the terms hereof, upon exercise of this Warrant and the issuance of the Warrant Stock, all certificates representing such Warrant Stock shall bear on the face or reverse thereof substantially the following legend:

"The securities which are represented by this certificate have not been registered under the Securities Act of 1933, and may not be sold, transferred, hypothecated or otherwise disposed of until a registration statement with respect thereto is declared effective under such act, or the Company receives an opinion of counsel for the Company that an exemption from the registration requirements of such act is available."

- 9. <u>Lost, Stolen or Destroyed Warrant</u>. In the event that the Holder notifies the Company that this Warrant has been lost, stolen or destroyed and provides (a) a letter, in form satisfactory to the Company, to the effect that it will indemnify the Company from any loss incurred by it in connection therewith, and/or (b) an indemnity bond in such amount as is reasonably required by the Company, the Company having the option of electing either (a) or (b) or both, the Company may, in its sole discretion, accept such letter and/or indemnity bond in lieu of the surrender of this Warrant as required by Section 1 hereof.
- 10. <u>Notices</u>. All notices required hereunder shall be given by first-class mail, postage prepaid, or overnight mail or courier and, if given by the Holder addressed to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Chief Executive Officer, or such other address as the Company may designate in writing to the Holder; and if given by the Company, addressed to the Holder at the address of the Holder shown on the books of the Company.
- 11. <u>Applicable Law; Jurisdiction</u>. This Warrant is issued under, and shall for all purposes be governed by and construed in accordance with, the laws of the State of Delaware, excluding choice of law principles thereof. The Company and, by its acceptance of this Warrant, the Holder hereby irrevocably consent and submit to the exclusive jurisdiction of any federal or state court located within Nassau or Suffolk County, New York over any dispute arising out of or relating to this Warrant and each party hereby irrevocably agrees that all claims in respect of such dispute or any legal action related thereto may be heard and determined in such courts. Each of the Company and the Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any objection that it or he may now or hereafter have to the laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute.

[Remainder of page intentionally left blank. Signature page follows.]

	IN WITNESS WHEREOF, the Company has caused this Warrant to b	be signed on its behalf, in its corporate name, by i	ts duly authorized officer, all as of the day and
year firs	st above written.		
		BIORESTORATIVE THERAPIES, IN	C.

Ву:	
	Mark Weinreb
	Chief Executive Officer

# WARRANT EXERCISE FORM

The undersigned hereby irrevocably elects to exercise the within of <b>BIORESTORATIVE THERAPIES</b> , <b>INC.</b> The undersigned hereby	
TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]  By:
Signature of Holder	Authorized Signatory
Signature of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]
Address(es) of Holder(s)	Address of Holder
Social Security Number(s) of Holder(s)	Tax Identification Number of Holder
Date	Date

# WARRANT ASSIGNMENT FORM

FOR	VALUE	RECEIVED, _					hereby	sells,	assigns	and	transfe	ers	unto
			(please	type	or	print	name	of	assignee)	with		ddress	a
									f BIORESTO				
"Company") rep	presented by tl	nis Warrant dated as o	of August 5, 2016	to the e	extent of		share	es and d	loes hereby in	revocably	constitute	and ap	poin
	attorney	to transfer the same on t	the books of the Cor	mpany with	h full pow	er of sub	ostitution in	the premi	ises.				
TO DE COMPI	EEED DV DV	NEW DELAY			TO DE	COMP	EEED DX	CODRO	D.ATE				
TO BE COMPL							ETED BY		,				
HOLDER, JOIN							P, LIMITED		LIIY				
IN COMMON O		EKS OF			COMPA	NYOK	TRUST HO	JLDEK					
COMMUNITY	PROPERTY												
Name(s) of Hold	er(s) [Please Pr	intl			Name of	Holder	[Please Print	t]					
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Signature of Hole	der				Aut	horized	Signatory						
-													
Signature of Hole	der, if jointly he	eld			Name an	d Title o	of Authorized	d Signato	ry				
					[Please P	rint]							
Date					Date								
			Si	<u>ignature(s</u>	<u>) Guarant</u>	<u>eed</u> :							

## FORM OF INVESTMENT REPRESENTATION LETTER

BioRestorative Therapies, Inc. 40 Marcus Drive Suite One Melville, New York 11747

emen

In connection with the acquisition of	shares of Common Stock (the "Shares") of BIORESTORATIVE THERAPIES, INC., a Delawar
corporation (the "Company"), by the undersigned from the Company	y pursuant to the exercise of a Warrant, dated as of August 5, 2016, the undersigned does hereby represen
and warrant to the Company as follows:	

- (a) The undersigned represents and warrants that the Shares acquired by it are being acquired for its own account, for investment purposes and not with a view to any distribution within the meaning of the Securities Act of 1933, as amended (the "Securities Act"). The undersigned will not sell, assign, mortgage, pledge, hypothecate, transfer or otherwise dispose of any of the Shares unless (i) a registration statement under the Securities Act with respect thereto is in effect and the prospectus included therein meets the requirements of Section 10 of the Securities Act, or (ii) the Company has received a written opinion of its counsel that, after an investigation of the relevant facts, such counsel is of the opinion that such proposed sale, assignment, mortgage, pledge, hypothecation, transfer or disposition does not require registration under the Securities Act or any state securities law.
- (b) The undersigned understands that the resale of the Shares is not, and is not being, registered under the Securities Act and the Shares must be held indefinitely unless they are subsequently registered thereunder or an exemption from such registration is available.
- (c) The undersigned recognizes that the acquisition of the Shares involves a high degree of risk and is suitable only for persons of adequate financial means who have no need for liquidity with respect to the Shares in that (a) it may not be able to liquidate the Shares in the event of emergency; (b) transferability is extremely limited; and (c) it could sustain a complete loss of its investment.
- (d) The undersigned represents and warrants that it (a) is competent to understand and does understand the nature of its investment; and (b) is able to bear the economic risk of an acquisition of the Shares.

- (e) The undersigned represents and warrants that it is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act. The undersigned meets the requirements of at least one of the suitability standards for an "accredited investor" as set forth on the Accredited Investor Certification attached hereto.
- (f) The undersigned has reviewed the Company's filings with the Securities and Exchange Commission, including the risk factors set forth therein, and has been afforded the opportunity to obtain such information regarding the Company as it has reasonably requested to evaluate the merits and risks of the undersigned's investment in the Shares. No oral or written representations have been made or oral information furnished to the undersigned or its advisers in connection with the investment in the Shares.
- (g) The undersigned confirms that the representations and warranties set forth in the Subscription Agreement pursuant to which the Warrant was issued are true and correct as of the date hereof as if made on and as of the date hereof with respect to the purchase of the Shares.
- (h) The undersigned acknowledges that counsel to the Company will be relying, and may rely, upon the foregoing in connection with any opinion of counsel it may give with regard to the issuance of the Shares by the Company to the undersigned, and any subsequent transfer of the Shares by the undersigned, and agrees to advise the Company and its counsel in writing in the event of any change in any of the foregoing.

Very truly yours,

TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER			
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]			
Signature of Holder	By:Authorized Signatory			
Signature of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]			
Date	Date			

## WARRANT EXERCISE

Accredited Investor Certification (Initial the appropriate box(es))

The undersigned represents and warrants that it, he or she is an "accredited investor" based upon the satisfaction of one or more of the following criteria:

(1) he or she is a natural person who has a net worth or joint net worth with his or her spouse in excess of \$1,000,000 at the time of his or her purchase<sup>1</sup>; or

(2) he or she is a natural person who had an individual income in excess of \$200,000 in each of the two most recent years or a joint income with his or her spouse in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year; or

(3) he or she is a director or executive officer of the Company; or

(4) it is either (a) a bank as defined in Section 3(a)(2) of the Securities Act or a savings and loan association or other institution as defined in Section 3(a)(5)(A) of the Securities Act, whether acting in its individual or fiduciary capacity, (b) a broker or dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934, (c) an insurance company as defined in Section 2(13) of the Securities Act, (d) an investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a)(48) of such act, (e) a small business investment company licensed by the United States Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958, (f) a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000 or (g) an employee benefit plan within the meaning of Title I of the Employee Retirement Income Security Act of 1974, if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such act, which plan fiduciary is a bank, savings and loan association, an insurance company or a registered investment advisor, or if the employee benefit plan has total assets in excess of \$5,000,000 or, if a self-directed plan, with investment decisions made solely by persons who otherwise meet these suitability

<sup>&</sup>lt;sup>1</sup> For purposes of calculating net worth:

<sup>(</sup>i) The Subscriber's primary residence shall not be included as an asset;

<sup>(</sup>ii) Indebtedness that is secured by the Subscriber's primary residence, up to the estimated fair market value of the primary residence at the date hereof, shall not be included as a liability (except that if the amount of such indebtedness outstanding at the date hereof exceeds the amount outstanding 60 days before the date hereof, other than as a result of the acquisition of the primary residence, the amount of such excess shall be included as a liability); and

<sup>(</sup>iii) Indebtedness that is secured by the Subscriber's primary residence in excess of the estimated fair market value of the primary residence at the date hereof shall be included as a liability.

(5) it is a private business development company as defined in Section 202(a	(5) it is a private business development company as defined in Section 202(a)(22) of the Investment Advisers Act of 1940; or				
	(6) it is an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, a corporation, a Massachusetts or similar business trust or a partnership not formed for the specific purpose of acquiring the Shares offered hereby, with total assets in excess of \$5,000,000; or				
	(7) it is a trust, with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the Shares, whose purchase is directed by a sophisticated person who has such knowledge and experience in financial and business matters that he or she is capable of evaluating the merits and risks of the prospective investment; or				
	(8) it is a corporation, partnership or other entity, and each and every equity owner of such entity initials a separate Accredited Investor Certification pursuant to which it, he or she certifies that it, he or she meets the qualifications set forth in either (1), (2), (3), (4), (5), (6) or (7) above.				
If the Warrant Holder is an INDIVIDUAL, or if the Shares are being acquired as JOINT TENANTS, as TENANTS IN COMMON, or as COMMUNITY PROPERTY:	If the Warrant Holder is a PARTNERSHIP, CORPORATION, LIMITED LIABILITY COMPANY or TRUST:				
Name(s) of Warrant Holder	Name of Warrant Holder				
Signature of Warrant Holder	By: Signature of Authorized Representative				
Signature, if jointly held	Name and Title of Authorized Representative				
Date	Date				

### VOID AFTER 5:00 P.M., EASTERN TIME, ON SEPTEMBER 26, 2021

NEITHER THIS WARRANT NOR THE WARRANT STOCK (AS HEREINAFTER DEFINED) HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE. THIS WARRANT AND THE WARRANT STOCK MAY BE TRANSFERRED ONLY IN COMPLIANCE WITH THE ACT AND SUCH LAWS. THIS LEGEND SHALL BE ENDORSED UPON ANY WARRANT ISSUED IN EXCHANGE FOR THIS WARRANT.

### BIORESTORATIVE THERAPIES, INC.

(Incorporated under the laws of the State of Delaware)

#### Warrant

80,000 Shares September 26, 2016

FOR VALUE RECEIVED, BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), hereby certifies that JOHN DESMARAIS (the "Holder") is entitled, subject to the provisions of this Warrant, to purchase from the Company up to EIGHTY THOUSAND (80,000) SHARES OF COMMON STOCK, \$.001 par value per share, of the Company ("Common Shares") at a price of FOUR DOLLARS (\$4.00) per share (the "Exercise Price") during the period commencing on the date hereof and terminating at 5:00 P.M. on the fifth anniversary of the date hereof.

The number of Common Shares to be received upon the exercise of this Warrant may be adjusted from time to time as hereinafter set forth. The Common Shares deliverable upon such exercise, and as adjusted from time to time, are hereinafter sometimes referred to as "Warrant Stock."

The Holder agrees with the Company that this Warrant is issued, and all the rights hereunder shall be held subject to, all of the conditions, limitations and provisions set forth herein.

## 1. Exercise of Warrants.

1.1 Exercise. Exercise of this Warrant shall be made upon surrender of this Warrant with the Warrant Exercise Form attached hereto duly completed and signed and delivered to the Company, at its address 40 Marcus Drive, Suite One, Melville, New York 11747 (or such office or agency of the Company as it may designate in writing to the Holder hereof). Payment upon exercise shall be made at the written option of the Holder either (i) in cash, wire transfer or by certified or official bank check payable to the order of the Company equal to the applicable aggregate Exercise Price, (ii) by the withholding of shares of Warrant Stock otherwise issuable upon exercise of this Warrant, in accordance with Section 1.2 or (iii) by a combination of either of the foregoing methods, for the number of shares of Warrant Stock specified in such form (as such number shall be adjusted to reflect any adjustment in the total number of shares of Warrant Stock issuable to the Holder pursuant to the terms of this Warrant) and the Holder shall thereupon be entitled to receive the number of duly authorized, validly issued, fully-paid and non-assessable shares of Warrant Stock determined as provided herein. The Company shall promptly (but in no event later than five (5) business days after the date on which the Company receives this Warrant, the executed Warrant Exercise Form and payment of the Exercise Price, if any (the "Exercise Date")), issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate (subject to the restrictions on transfer described in the legend set forth on the face of this Warrant), a certificate for the shares of Warrant Stock issuable upon such exercise, with such restrictive legend as required by the Act, as applicable. Subject to the delivery of this Warrant, the executed Warrant Exercise Form and payment of the Exercise Price, if any, any person so designated by the Holder to receive Warrant Stock shall be deemed to have become

1.2 <u>Net Exercise</u>. If the Fair Market Value (as hereinafter defined) of one Common Share is greater than the Exercise Price of one share of Warrant Stock (at the date of calculation as set forth below), in lieu of exercising this Warrant for cash, the Holder may elect to receive shares of Warrant Stock equal to the number of Common Shares computed using the following formula:

X = Y\*(A-B)/A

- Where X= the number of Common Shares to be issued to the Holder
  - Y= the number of Common Shares purchasable under this Warrant or, if only a portion of this Warrant is being exercised, the portion of this Warrant being exercised (at the date of such calculation)
  - A= the Fair Market Value of one Common Share
  - B= the Exercise Price (as adjusted to the date of such calculation).
- 1.3 Fair Market Value. For purposes hereof, "Fair Market Value" shall be determined as follows:
- (a) if the Common Shares of the Company are listed on any established stock exchange or a national market system, including, without limitation, The Nasdaq Stock Market, or quoted on any other market for which closing sales prices are available, including, without limitation, the OTCQB, Fair Market Value shall be the average of the closing sales prices for the Common Shares, as quoted on such exchange, system or other market, on the five (5) trading days immediately preceding the Exercise Date;

(b) if the Common Shares of the Company are quoted but closing sales prices are not reported, then Fair Market Value shall be the average of the mean between the high bid and low asked prices for the Common Shares on the five (5) trading days immediately preceding the Exercise Date; or

- (c) in the absence of any quotations for the Common Shares of the Company during the five (5) trading days immediately preceding the Exercise Date, Fair Market Value shall be determined in good faith by the Board of Directors of the Company.
- 2. Registered Owner. The Company may consider and treat the person in whose name this Warrant shall be registered as the absolute owner thereof for all purposes whatsoever and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Warrant shall have the right to transfer it by assignment and the transferee thereof, upon his registration as owner of this Warrant, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Warrant to the Company at its offices together with the Warrant Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of his address, and shall submit appropriate evidence regarding the transfer so that this Warrant may be registered in the name of the transferee. This Warrant is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Warrant not registered at the time of sending the communication.
- 3. Reservation of Shares. During the period within which the rights represented by this Warrant may be exercised, the Company shall, at all times, reserve and keep available out of its authorized capital stock, solely for the purposes of issuance upon exercise of this Warrant, such number of its Common Shares as shall be issuable upon the exercise of this Warrant; and if at any time the number of authorized Common Shares shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action as may be necessary to increase its authorized but unissued Common Shares to such number of shares as shall be sufficient for such purpose; the Company shall have analogous obligations with respect to any other securities or property issuable upon exercise of this Warrant.
- 4. <u>Fractional Shares</u>. The Company shall not be required to issue certificates representing fractions of Common Shares, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the Company and the Holder that all fractional interests shall be eliminated.
- 5. **Rights of the Holder**. The Holder shall not, by virtue hereof, be entitled to any voting or other rights of a stockholder of the Company, either at law or in equity, and the rights of the Holder are limited to those expressed in this Warrant.

## 6. Anti-Dilution Provisions.

- 6.1 Adjustments for Stock Dividends; Combinations, Etc. (a) In case the Company shall do any of the following (an "Event"):
  - (i) declare a dividend or other distribution on its Common Shares payable in Common Shares of the Company,

- (ii) subdivide the outstanding Common Shares pursuant to a stock split or otherwise,
- (iii) combine the outstanding Common Shares into a smaller number of shares pursuant to a reverse split or otherwise, or
- (iv) reclassify its Common Shares,

then the Exercise Price in effect at the time of the record date for such dividend or other distribution or of the effective date of such subdivision, combination or reclassification shall be changed to a price determined by dividing (a) the product of the number of Common Shares outstanding immediately prior to such Event, multiplied by the Exercise Price in effect immediately prior to such Event by (b) the number of Common Shares outstanding immediately after such Event. Each such adjustment of the Exercise Price shall be calculated to the nearest one-hundredth of a cent. Such adjustment shall be made successively whenever any Event listed above shall occur.

- (b) Whenever the Exercise Price is adjusted as set forth in Section 6.1 (whether or not the Company then or thereafter elects to issue additional Warrants in substitution for an adjustment in the number of shares of Warrant Stock), the number of shares of Warrant Stock specified in each Warrant which the Holder may purchase shall be adjusted, to the nearest full share, by multiplying such number of shares of Warrant Stock immediately prior to such adjustment by a fraction, of which the numerator shall be the Exercise Price immediately prior to such adjustment and the denominator shall be the Exercise Price immediately thereafter.
- 6.2 Adjustment for Reorganization, Consolidation or Merger. In case of any reorganization of the Company (or any other entity, the securities of which are at the time receivable on the exercise of this Warrant) after the date hereof or in case after such date the Company (or any such other entity) shall consolidate with or merge with or into another entity, then, and in each such case, the Holder of this Warrant upon the exercise thereof as provided in Section 1 at any time after the consummation of such reorganization, consolidation or merger, shall be entitled to receive, in lieu of the securities and property receivable upon the exercise of this Warrant prior to such consummation, the securities or property to which such Holder would have been entitled upon such consummation if such Holder had exercised this Warrant immediately prior thereto, all subject to further adjustment as provided in Section 6.1; in each such case, the terms of this Warrant shall be applicable to the securities or property receivable upon the exercise of this Warrant after such consummation.
- 7. <u>Investment Intent</u>. Unless, prior to the exercise of this Warrant, the issuance of the Warrant Stock has been registered with the Securities and Exchange Commission pursuant to the Act, the Warrant Exercise Form shall be accompanied by the Investment Representation Letter attached hereto, duly executed by the Holder.

### 8. Restrictions on Transfer.

8.1 Transfer to Comply with the Securities Act of 1933. Neither this Warrant nor any Warrant Stock may be sold, assigned, transferred or otherwise disposed of except as follows: (1) to a person who, in the opinion of counsel, is a person to whom this Warrant or the Warrant Stock may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto and then only against receipt of an agreement of such person to comply with the provisions of this Section 8 with respect to any resale, assignment, transfer or other disposition of such securities; or (2) to any person upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale, assignment, transfer or disposition.

8.2 <u>Legend</u>. Subject to the terms hereof, upon exercise of this Warrant and the issuance of the Warrant Stock, all certificates representing such Warrant Stock shall bear on the face or reverse thereof substantially the following legend:

"The securities which are represented by this certificate have not been registered under the Securities Act of 1933, and may not be sold, transferred, hypothecated or otherwise disposed of until a registration statement with respect thereto is declared effective under such act, or the Company receives an opinion of counsel for the Company that an exemption from the registration requirements of such act is available."

- 9. Lost, Stolen or Destroyed Warrant. In the event that the Holder notifies the Company that this Warrant has been lost, stolen or destroyed and provides (a) a letter, in form satisfactory to the Company, to the effect that it will indemnify the Company from any loss incurred by it in connection therewith, and/or (b) an indemnity bond in such amount as is reasonably required by the Company, the Company having the option of electing either (a) or (b) or both, the Company may, in its sole discretion, accept such letter and/or indemnity bond in lieu of the surrender of this Warrant as required by Section 1 hereof.
- 10. <u>Notices</u>. All notices required hereunder shall be given by first-class mail, postage prepaid, or overnight mail or courier and, if given by the Holder addressed to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Chief Executive Officer, or such other address as the Company may designate in writing to the Holder; and if given by the Company, addressed to the Holder at the address of the Holder shown on the books of the Company.
- 11. <u>Applicable Law; Jurisdiction</u>. This Warrant is issued under, and shall for all purposes be governed by and construed in accordance with, the laws of the State of Delaware, excluding choice of law principles thereof. The Company and, by its acceptance of this Warrant, the Holder hereby irrevocably consent and submit to the exclusive jurisdiction of any federal or state court located within Nassau or Suffolk County, New York over any dispute arising out of or relating to this Warrant and each party hereby irrevocably agrees that all claims in respect of such dispute or any legal action related thereto may be heard and determined in such courts. Each of the Company and the Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any objection that it or he may now or hereafter have to the laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute.

[Remainder of page intentionally left blank. Signature page follows.]

<b>IN WITNESS WHEREOF</b> , the Company has caused this Warrant to be sign year first above written.	ed on its behalf, in its corporate name, by its duly authorized officer, all as of the day and
	BIORESTORATIVE THERAPIES, INC.
	By: Mark Weinreb
	Chief Executive Officer

# WARRANT EXERCISE FORM

To: BIORESTORATIVE THERAPIES, INC.

	The undersigned, pursuant to the provisions set forth in the attached Warrant	, dated September 26, 2016, hereby irrevocably elects to purchase (check applicable box):
[]	shares of the Common Stock covered by such Warrant; or	
[]	the maximum number of shares of Common Stock covered by such Warrant	pursuant to the cashless exercise procedure set forth therein.
takes t	The undersigned herewith makes payment of the full purchase price for such form of (check applicable box or boxes):	ch shares of \$ at the price per share provided for in such Warrant. Such payment
[]	\$ in lawful money of the United States; and/or	
[]	the cancellation of such portion of the attached Warrant as is exercisable for share, or an aggregate Fair Market Value of \$, for purposes of the	a total of shares of Common Stock (using a Fair Market Value of \$ per is calculation);
HOLE IN CO	E COMPLETED BY INDIVIDUAL DER, JOINT TENANTS, TENANTS MMON OR AS HOLDERS OF MUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER
Name(	s) of Holder(s) [Please Print]	Name of Holder [Please Print]
Signati	are of Holder	By: Authorized Signatory
Signati	ure of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]
Addres	ss(es) of Holder(s)	Address of Holder
Social	Security Number(s) of Holder(s)	Tax Identification Number of Holder
Date		Date
		nform in all respects to the e face of the attached Warrant.

# BIORESTORATIVE THERAPIES, INC. $\underline{WARRANT\ ASSIGNMENT\ FORM}$

FOR VALUE RECEIVED,	hereby sells, assigns and transfers unto		(please type or print name of
assignee) with an address at		the right to purchase sh	nares of Common Stock of
BIORESTORATIVE THERAPIES, INC. (the "Con	npany") represented by this Warrant dated as of September	26, 2016 to the extent of	shares and does hereby
irrevocably constitute and appoint	attorney to transfer the same on the books of the Com	oany with full power of substitu	ition in the premises.
TO BE COMPLETED BY INDIVIDUAL	TO BE COMPLETE	) BY CORPORATE,	
HOLDER, JOINT TENANTS, TENANTS	PARTNERSHIP, LIM	ITED LIABILITY	
IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	COMPANY OR TRU	ST HOLDER	
Name (a) of Haldard (b) [Dlana Drive]	N C.Y1.J [D]	Dirinal	
Name(s) of Holder(s) [Please Print]	Name of Holder [Pleas	Printj	
	By: _		
Signature of Holder	Authorized Signa	ory	
Cianatana a CIV-11-na i Girinda da 11	Name and Tide of And	:1 C:	
Signature of Holder, if jointly held	Name and Title of Auth [Please Print]	orized Signatory	
Date	Date		
	Signature(s) Guaranteed:		

#### FORM OF INVESTMENT REPRESENTATION LETTER

BioRestorative Therapies, Inc. 40 Marcus Drive Suite One Melville, New York 11747

Gentl	emen:

In connection with the acquisition of	shares of Common Stock (	(the "Shares") of BI	ORESTORATIVE T	THERAPIES, INC.,	a Delaware
corporation (the "Company"), by the undersigned from the Compan	y pursuant to the exercise of	of a Warrant, dated as	s of September 26, 2	2016, the undersigned	does hereby
represent and warrant to the Company as follows:					

- (a) The undersigned represents and warrants that the Shares acquired by it are being acquired for its own account, for investment purposes and not with a view to any distribution within the meaning of the Securities Act of 1933, as amended (the "Securities Act"). The undersigned will not sell, assign, mortgage, pledge, hypothecate, transfer or otherwise dispose of any of the Shares unless (i) a registration statement under the Securities Act with respect thereto is in effect and the prospectus included therein meets the requirements of Section 10 of the Securities Act, or (ii) the Company has received a written opinion of its counsel that, after an investigation of the relevant facts, such counsel is of the opinion that such proposed sale, assignment, mortgage, pledge, hypothecation, transfer or disposition does not require registration under the Securities Act or any state securities law.
- (b) The undersigned understands that the resale of the Shares is not, and is not being, registered under the Securities Act and the Shares must be held indefinitely unless they are subsequently registered thereunder or an exemption from such registration is available.
- (c) The undersigned recognizes that the acquisition of the Shares involves a high degree of risk and is suitable only for persons of adequate financial means who have no need for liquidity with respect to the Shares in that (a) it may not be able to liquidate the Shares in the event of emergency; (b) transferability is extremely limited; and (c) it could sustain a complete loss of its investment.
- (d) The undersigned represents and warrants that it (a) is competent to understand and does understand the nature of its investment; and (b) is able to bear the economic risk of an acquisition of the Shares.

- (e) The undersigned represents and warrants that it is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act. The undersigned meets the requirements of at least one of the suitability standards for an "accredited investor" as set forth on the Accredited Investor Certification attached hereto.
- (f) The undersigned has reviewed the Company's filings with the Securities and Exchange Commission, including the risk factors set forth therein, and has been afforded the opportunity to obtain such information regarding the Company as it has reasonably requested to evaluate the merits and risks of the undersigned's investment in the Shares. No oral or written representations have been made or oral information furnished to the undersigned or its advisers in connection with the investment in the Shares.
- (g) The undersigned confirms that the representations and warranties set forth in the Subscription Agreement pursuant to which the Warrant was issued are true and correct as of the date hereof as if made on and as of the date hereof with respect to the purchase of the Shares.
- (h) The undersigned acknowledges that counsel to the Company will be relying, and may rely, upon the foregoing in connection with any opinion of counsel it may give with regard to the issuance of the Shares by the Company to the undersigned, and any subsequent transfer of the Shares by the undersigned, and agrees to advise the Company and its counsel in writing in the event of any change in any of the foregoing.

Very truly yours,

TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY

TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER

IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	COMPANY OR TRUST HOLDER	
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]	
	Ву:	
Signature of Holder	Authorized Signatory	
Signature of Holder, if jointly held	Name and Title of Authorized Signatory	
	[Please Print]	
Date	Date	

### WARRANT EXERCISE

<u>Accredited Investor Certification</u> (Initial the appropriate box(es))

The undersigned represents and warrants that it, he or she is an "accredited investor" based upon the satisfaction of one or more of the following criteria:
 (1) he or she is a natural person who has a net worth or joint net worth with his or her spouse in excess of \$1,000,000 at the time of his or her purchase 1; or
 (2) he or she is a natural person who had an individual income in excess of \$200,000 in each of the two most recent years or a joint income with his or her spouse in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year; or
 (3) he or she is a director or executive officer of the Company; or
(4) it is either (a) a bank as defined in Section 3(a)(2) of the Securities Act or a savings and loan association or other institution as defined in Section 3(a)(5)(A) of the Securities Act, whether acting in its individual or fiduciary capacity, (b) a broker or dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934, (c) an insurance company as defined in Section 2(13) of the Securities Act, (d) an investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a)(48) of such act, (e) a small business investment company licensed by the United States Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958, (f) a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000 or (g) an employee benefit plan within the meaning of Title I of the Employee Retirement Income Security Act of 1974, if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such act, which plan fiduciary is a bank, savings and loan association, an insurance company or a registered investment advisor, or if the employee benefit plan has total assets in excess of \$5,000,000 or, if a self-directed plan, with investment decisions made solely by persons who otherwise meet these suitability standards; or

- (i) The undersigned's primary residence shall not be included as an asset;
- (ii) Indebtedness that is secured by the undersigned's primary residence, up to the estimated fair market value of the primary residence at the date hereof, shall not be included as a liability (except that if the amount of such indebtedness outstanding at the date hereof exceeds the amount outstanding 60 days before the date hereof, other than as a result of the acquisition of the primary residence, the amount of such excess shall be included as a liability); and
- (iii) Indebtedness that is secured by the undersigned's primary residence in excess of the estimated fair market value of the primary residence at the date hereof shall be included as a liability.

<sup>&</sup>lt;sup>1</sup>For purposes of calculating net worth:

(5) it is a private business development company as defined in Section 202(a)(3)	22) of the Investment Advisers Act of 1940; or			
	(6) it is an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, a corporation, a Massachusetts or similar business trust or a partnership not formed for the specific purpose of acquiring the Shares offered hereby, with total assets in excess of \$5,000,000; or			
	specific purpose of acquiring the Shares, whose purchase is directed by a sophisticated natters that he or she is capable of evaluating the merits and risks of the prospective			
(8) it is a corporation, partnership or other entity, and each and every equity over it, he or she certifies that it, he or she meets the qualifications set forth in either	where of such entity initials a separate Accredited Investor Certification pursuant to which r (1), (2), (3), (4), (5), (6) or (7) above.			
If the Warrant Holder is an INDIVIDUAL, or if the Shares are being acquired as JOINT TENANTS, as TENANTS IN COMMON, or as COMMUNITY PROPERTY:	If the Warrant Holder is a PARTNERSHIP, CORPORATION, LIMITED LIABILITY COMPANY or TRUST:			
Name(s) of Warrant Holder	Name of Warrant Holder			
	Ву:			
Signature of Warrant Holder	Signature of Authorized Representative			
Signature, if jointly held	Name and Title of Authorized Representative			
Date	Date			

September 26, 2016

John M. Desmarais 26 Deer Creek Lane Mt. Kisco, New York 10549

Dear John:

Reference is made to the Subscription Agreement, dated September 26, 2016, by and between BioRestorative Therapies, Inc. (the "Company") and you (the "Subscription Agreement").

Pursuant to the Subscription Agreement, the Company is issuing to you 80,000 shares of Common Stock of the Company and a Warrant for the purchase of 80,000 shares of Common Stock of the Company for a subscription price of \$240,000.

In consideration of your purchase of the shares of Common Stock and Warrant pursuant to the Subscription Agreement, the Company agrees that the expiration dates of the Warrants, dated March 18, 2016, issued to you for the purchase of 444,444 and 400,000 shares of the Company's Common Stock, respectively (the "Warrants"), are extended for a period of one year from November 18, 2016 and March 18, 2017, respectively, to November 18, 2017 and March 18, 2018, respectively

Except as modified herein, the Warrants shall continue in full force and effect in accordance with their terms.

Very truly yours,

BIORESTORATIVE THERAPIES, INC.

By:

Mark Weinreb, Chief Executive Officer

THIS PROMISSORY NOTE HAS BEEN ACQUIRED FOR INVESTMENT PURPOSES ONLY AND NOT FOR DISTRIBUTION AND MAY BE TRANSFERRED OR OTHERWISE DISPOSED OF ONLY IN COMPLIANCE WITH THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT").

#### BIORESTORATIVE THERAPIES, INC.

### **DECEMBER 14, 2016**

#### PROMISSORY NOTE

BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), in consideration for SIXTY THOUSAND DOLLARS (\$60,000) received, hereby promises to pay to JOHN M. DESMARAIS (the "Holder") at the offices of the Company, 40 Marcus Drive, Suite One, Melville, New York 11747, the principal sum of SIXTY-FIVE THOUSAND DOLLARS (\$65,000) (the "Principal Amount"), without interest, on January 31, 2017 (the "Maturity Date") in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts.

- 1. Registered Owner. The Company may consider and treat the person in whose name this Note shall be registered as the absolute owner thereof for all purposes whatsoever (whether or not this Note shall be overdue) and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Note shall have the right to transfer it by assignment and the transferee thereof, upon its registration as owner of this Note, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Note to the Company at its offices together with the Note Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of its address, and shall submit appropriate evidence regarding the transfer so that this Note may be registered in the name of the transferee. This Note is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Note not registered at the time of sending the communication.
- 2. Events of Default. If (a) the Company shall make a general assignment for the benefit of creditors; (b) the Company shall be adjudicated a bankrupt or insolvent; (c) the Company shall file a voluntary petition in bankruptcy or a petition or an answer seeking an arrangement with creditors; (d) the Company shall take advantage of any bankruptcy, insolvency or readjustment of debt law or statute or file an answer admitting the material allegations of a petition filed against it in any proceeding under any such law; (e) the Company shall apply for or consent to the appointment of a receiver, trustee or liquidator for all or substantially all of its assets; or (f) the Company shall have an involuntary case commenced against it under the Federal bankruptcy laws, which case is not dismissed or stayed within sixty (60) days (each an "Event of Default"), then, at any time thereafter and unless such Event of Default shall have been cured or shall have been waived in writing by the Holder, the Holder may, by written notice to the Company, declare the entire unpaid Principal Amount of this Note then outstanding to be forthwith due and payable, whereupon the same shall become forthwith due and payable (provided that under no circumstances shall any interest on the Principal Amount be payable for the period through the Maturity Date).

- 3. <u>Interest; Costs of Collection</u>. In the event the Company shall default in the payment of this Note, then the Company shall pay, in addition to the unpaid Principal Amount, interest at the rate of one percent (1%) per month on the unpaid Principal Amount, effective with the day following the Maturity Date, together with the costs and expenses incurred in effecting collection hereunder, including reasonable attorneys' fees.
- 4. **Investment Intent**. The Holder, by its acceptance hereof, hereby represents and warrants that this Note is being acquired for investment purposes only and without a view to the distribution thereof, and may be transferred only in compliance with the Act.
- 5. <u>Transfer to Comply with the Securities Act of 1933</u>. This Note may not be sold or otherwise disposed of except as follows: (a) to a person or entity to whom this Note may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto; or (b) to any person or entity upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale or disposition, and thereafter to all successive assignees.
- 6. Lost, Stolen or Destroyed Note. In the event that the Holder notifies the Company that this Note has been lost, stolen or destroyed and provides (a) a letter, in form satisfactory to the Company, to the effect that it will indemnify the Company from any loss incurred by it in connection therewith, and/or (b) an indemnity bond in such amount as is reasonably required by the Company, the Company having the option of electing either (a) or (b) or both, the Company may, in its sole discretion, accept such letter and/or indemnity bond in lieu of the surrender of this Note as required by the terms hereof.
- 7. <u>Notices</u>. All notices required hereunder shall be given by first-class mail, postage prepaid, or overnight mail or courier and, if given by the Holder addressed to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Secretary, or such other address as the Company may designate in writing to the Holder; and if given by the Company, addressed to the Holder at the address of the Holder shown on the books of the Company.
- 8. <u>Applicable Law; Jurisdiction</u>. This Note is issued under, and shall for all purposes be governed by and construed in accordance with, the laws of the State of New York, excluding choice of law principles thereof. The Company and, by its acceptance of this Note, the Holder hereby irrevocably consent and submit to the exclusive jurisdiction of any federal or state court located within Nassau or Suffolk County, New York over any dispute arising out of or relating to this Note and each party hereby irrevocably agrees that all claims in respect of such dispute or any legal action related thereto may be heard and determined in such courts. Each of the Company and the Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any objection that it or he may now or hereafter have to the laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute.

9. <u>Interpretation</u> . The Company and, by its acceptance of this Note, the Holder acknowledge that they have been represented by counsel, or afforded the opportunity
to be represented by counsel, in connection with this Note. Accordingly, any rule of law or any legal decision that would require the interpretation of any claimed ambiguities in
this Note against the party that drafted it has no application and is expressly waived by the Company and the Holder. The provisions of this Note shall be interpreted in a
reasonable manner to give effect to the intent of the Company and the Holder.

10. <u>Miscellaneous</u>. This Note evidences the entire obligation of the Company with respect to the repayment of the Principal Amount hereof and the other matters provided for herein. No provision of this Note may be modified except by an instrument in writing signed by the Company and the Holder. Payment of the Principal Amount shall be made to the registered Holder of this Note on or after the Maturity Date contemporaneous with and upon presentation of this Note for payment. No interest shall be due on this Note for such period of time that may elapse between the Maturity Date and its presentation for payment.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Company has caused this Note to be signe	d on its behalf, in its corporate name, by its duly authorized officer, all as of the day and
year first above written.	
	BIORESTORATIVE THERAPIES, INC.

By:	
	Mark Weinreb
	Chief Executive Officer

# PROMISSORY NOTE

# NOTE ASSIGNMENT FORM

# FOR VALUE RECEIVED

The undersigned	_ (please print or typewrite name of assignor) hereby sells, assigns and transfers unto
(please print or typewrite name, address and social security or taxpayer ic dated December 14, 2016, in the original principal amount of \$65,000 and	dentification number, if any, of assignee) the within Promissory Note of BioRestorative Therapies, Inc. d hereby authorizes the Company to transfer this Note on its books.
If the Holder is an individual:	If the Holder is not an individual:
Name(s) of Holder	Name of Holder
Signature of Holder	By: Signature of Authorized Representative
Signature, if jointly held	Name and Title of Authorized Representative
Date	Date
	(Signature(s) guaranteed)

December 14, 2016

John M. Desmarais 26 Deer Creek Lane Mt. Kisco, New York 10549

Dear John:

Reference is made to the Promissory Note of even date from BioRestorative Therapies, Inc. (the "Company") to you with respect to a loan made by you to the Company in the amount of \$60,000.

In consideration of your loan, the Company agrees that the expiration dates of the Warrants, dated March 18, 2016, issued to you for the purchase of 444,444 and 400,000 shares of the Company's Common Stock, respectively (the "Warrants"), are extended to December 31, 2018.

Except as modified herein, the Warrants shall continue in full force and effect in accordance with their terms.

Very truly yours,

BIORESTORATIVE THERAPIES, INC.

By:

Mark Weinreb, Chief Executive Officer

#### PROMISSORY NOTE

U.S. \$242,000.00 January 3, 2017

FOR VALUE RECEIVED, BioRestorative Therapies, Inc., a Delaware corporation ("Borrower"), promises to pay in lawful money of the United States of America to the order of St. George Investments LLC, a Utah limited liability company, or its successors or assigns ("Lender"), the principal sum of \$242,000.00, together with all other amounts due under this Promissory Note (this "Note"). This Note is issued pursuant to that certain Note Purchase Agreement of even date herewith between Borrower and Lender (the "Purchase Agreement").

- 1. <u>PAYMENT</u>. Borrower shall pay to Lender the entire outstanding balance of this Note on or before the date that is six (6) months from the date hereof (the "**Maturity Date**"). Borrower will make all payments of sums due hereunder to Lender at Lender's address set forth in the Purchase Agreement, or at such other place as Lender may designate in writing. Unless otherwise agreed or required by applicable law, payments will be applied first to any unpaid collection costs and late charges, then to accrued interest and finally to principal.
- 2. <u>INTEREST</u>. Interest shall not accrue on the unpaid principal balance of this Note unless an Event of Default (as defined below) occurs. Upon the occurrence of an Event of Default, the outstanding balance of this Note shall bear interest at the lesser of the rate of eighteen percent (18%) per annum or the maximum rate permitted by applicable law, compounding daily and calculated on the basis of a 360-day year, from the date due until paid.
- 3. <u>ORIGINAL ISSUE DISCOUNT</u>; <u>TRANSACTION EXPENSES</u>. This Note carries an original issue discount of \$40,000.00. In addition, Borrower agrees to pay \$2,000.00 to Lender to cover Lender's legal fees, accounting costs, due diligence, monitoring and other transaction costs incurred in connection with the purchase and sale of this Note, all of which amounts are included in the initial principal balance of this Note and are fully earned and payable as of the date hereof (subject only to the prepayment discount set forth in Section 4 below).
- 4. <u>PREPAYMENT</u>. Borrower may pay without penalty all or a portion of the amount owed earlier than it is due. Early payments of less than all principal, fees and interest outstanding will not, unless agreed to by Lender in writing, relieve Borrower of any of Borrower's obligations hereunder. Should Borrower make any prepayment in accordance with the schedule set forth below, the amount payable shall be the amount set forth below under the heading "Prepayment Amount," and upon Lender's receipt of such amount, this Note shall be deemed paid in full notwithstanding the fact that such payment may be less than the initial outstanding balance of this Note:

Prepayment Deadline	Prepayment Amount
Borrower pays the entire outstanding balance of this Note on or before the date that is ninety (90) days from the date this Note is issued	\$222,000.00 (which reflects a $$20,000.00$ discount to the original outstanding balance)
Borrower pays the entire outstanding balance of this Note after the date that is ninety (90) days from the date this Note is issued but on or before the date that is one hundred thirty-five (135) days from the date this Note is issued	\$232,000.00 (which reflects a $$10,000.00$ discount to the original outstanding balance)

- 5. EVENT OF DEFAULT. The occurrence and continuance of any of the following shall constitute an "Event of Default" under this Note:
- (a) Failure to Pay. Borrower shall fail to pay when due, whether at stated maturity, upon acceleration or otherwise, any principal or interest payment, or any other payment required under the terms of this Note on the date due.
- (b) <u>Breaches of Covenants</u>. Borrower fails to comply in any material respect with or to perform when due any other term, obligation, covenant, or condition contained in this Note, in the Purchase Agreement, any other Transaction Document (as defined in the Purchase Agreement), and such failure continues unremedied for a period of thirty (30) days following receipt of written notice thereof from Lender.
- (c) <u>Representations and Warranties</u>. Any representation or warranty made by Borrower to Lender in this Note, the Purchase Agreement, any other Transaction Document, or any related agreement shall be false, incorrect, incomplete or misleading in any material respect when made or furnished.
- (d) <u>Voluntary Bankruptcy or Insolvency Proceedings</u>. Borrower shall (i) apply for or consent to the appointment of a receiver, trustee, liquidator or custodian of itself or of all or a substantial part of its property, (ii) make a general assignment for the benefit of its or any of its creditors, (iii) be dissolved or liquidated, or (iv) commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it.
- (e) <u>Involuntary Bankruptcy or Insolvency Proceedings</u>. Proceedings for the appointment of a receiver, trustee, liquidator, or custodian of Borrower or of all or a substantial part of its property, or an involuntary case or other proceedings seeking liquidation, reorganization, or other relief with respect to Borrower or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect shall be commenced and an order for relief entered or such proceeding shall not be dismissed or discharged within sixty (60) days of commencement.
- (f) <u>Judgment</u>. A judgment or judgments for the payment of money in excess of the sum of \$200,000.00 in the aggregate shall be rendered against Borrower and either (i) the judgment creditor executes on such judgment or (ii) such judgment remains unpaid or undischarged for more than sixty (60) days from the date of entry thereof or such longer period during which execution of such judgment shall be stayed during an appeal from such judgment.
- (g) Attachment. Any execution or attachment shall be issued whereby any substantial part of the property of Borrower shall be taken and the same shall not have been vacated or stayed within thirty (30) days after the issuance thereof.

(h) <u>Cross Default</u>. Borrower breaches or any event of default occurs under any term or provision of any Other Agreement (as defined hereafter) and such breach or event of default remains uncured for a period of thirty (30) days following receipt of written notice thereof from Lender. For purposes hereof, "Other Agreement" means collectively, (i) all existing and future agreements and instruments between, among or by Borrower (or an affiliate), on the one hand, and Lender (or an affiliate), on the other hand, and (ii) any material financing agreement or a material agreement that affects Borrower's ongoing business operations.

### 6. ACCELERATION; REMEDIES.

- (a) At any time following the occurrence of an Event of Default (other than an Event of Default referred to in Sections 5(d) and 5(e)), Lender may, by written notice to Borrower, declare all unpaid principal, plus all accrued interest and other amounts due hereunder to be immediately due and payable at the Mandatory Default Amount (as defined below) without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained herein to the contrary notwithstanding. Upon the occurrence or existence of any Event of Default described in Sections 5(d) and 5(e), immediately and without notice, all outstanding unpaid principal, plus all accrued interest and other amounts due hereunder shall automatically become immediately due and payable at the Mandatory Default Amount, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained herein to the contrary notwithstanding. In addition to the foregoing remedies, upon the occurrence or existence of any Event of Default, Lender may exercise any other right, power or remedy permitted to it by law, either by suit in equity or by action at law, or both. For purposes hereof, the term "Mandatory Default Amount" means an amount equal to 110% of the outstanding balance of this Note as of the date the applicable Event of Default occurred, plus all interest, fees, and charges that may accrue on such outstanding balance thereafter.
- (b) Upon the occurrence of a Change in Control (as defined below), and without further notice to Borrower, all unpaid principal, plus all accrued interest and other amounts due hereunder, shall become immediately due and payable. For purposes hereof, a "Change in Control" means a sale of all or substantially all of Borrower's assets, or a merger, consolidation, or other capital reorganization of Borrower with or into another company; *provided however* that a merger, consolidation, or other capital reorganization in which the holders of the equity of Borrower outstanding immediately prior to such transaction continue to hold (either by the voting securities remaining outstanding or by being converted into voting securities of the surviving entity) more than fifty percent (50%) of the total voting power represented by the voting securities of Borrower, or such surviving entity, outstanding immediately after such transaction shall not constitute a Change in Control.
- 7. <u>UNCONDITIONAL OBLIGATION</u>; <u>NO OFFSET</u>. Borrower acknowledges that this Note is an unconditional, valid, binding and enforceable obligation of Borrower not subject to offset, deduction or counterclaim of any kind. Borrower hereby waives any rights of offset it now has or may have hereafter against Lender, its successors and assigns, and agrees to make all payments due hereunder in accordance with the terms of this Note.

- 8. NO USURY. Notwithstanding any other provision contained in this Note or in any instrument given to evidence the obligations evidenced hereby: (a) the rates of interest and charges provided for herein and therein shall in no event exceed the rates and charges which result in interest being charged at a rate equaling the maximum allowed by law; and (b) if, for any reason whatsoever, Lender ever receives as interest in connection with the transaction of which this Note is a part an amount which would result in interest being charged at a rate exceeding the maximum allowed by law, such amount or portion thereof as would otherwise be excessive interest shall automatically be applied toward reduction of the unpaid principal balance then outstanding hereunder and not toward payment of interest.
- 9. <u>ATTORNEYS' FEES</u>. If this Note is placed in the hands of an attorney for collection or enforcement prior to commencing arbitration or legal proceedings, or is collected or enforced through any arbitration or legal proceeding, or Lender otherwise takes action to collect amounts due under this Note or to enforce the provisions of this Note, then Borrower shall pay the costs incurred by Lender for such collection, enforcement or action including, without limitation, reasonable attorneys' fees and disbursements.
- 10. <u>GOVERNING LAW; VENUE</u>. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of Utah, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Utah or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Utah. The provisions set forth in the Purchase Agreement to determine the proper venue for any disputes are incorporated herein by this reference.
- 11. <u>ARBITRATION OF DISPUTES</u>. Borrower agrees that any dispute arising under this Note shall be subject to the Arbitration Provisions (as defined in the Purchase Agreement) set forth as an exhibit to the Purchase Agreement.
  - 12. WAIVERS. Borrower hereby waives presentment, notice of nonpayment, notice of dishonor, protest, demand and diligence.
- 13. LOSS OR MUTILATION. On receipt by Borrower of evidence reasonably satisfactory to Borrower of the loss, theft, destruction or mutilation of this Note and, in the case of any such loss, theft or destruction of this Note, on delivery of an indemnity agreement reasonably satisfactory in form and amount to Borrower or, in the case of any such mutilation, on surrender and cancellation of such Note, Borrower at its expense will execute and deliver, in lieu thereof, a new Note of like tenor.
- 14. <u>NOTICES</u>. Any notice required or permitted hereunder shall be given in the manner provided in the subsection titled "Notices" in the Purchase Agreement, the terms of which are incorporated herein by this reference.
  - 15. AMENDMENT AND WAIVER. This Note and its terms and conditions may be amended, waived or modified only in writing by Borrower and Lender.
- 16. <u>SEVERABILITY</u>. If any part of this Note is construed to be in violation of any law, such part shall be modified to achieve the objective of the parties to the fullest extent permitted and the balance of this Note shall remain in full force and effect.

- 17. <u>ASSIGNMENTS</u>. Borrower may not assign this Note without the prior written consent of Lender. This Note may be offered, sold, assigned or transferred by Lender without the consent of Borrower.
- 18. <u>FINAL NOTE</u>. This Note, together with the other Transaction Documents, contains the complete understanding and agreement of Borrower and Lender and supersedes all prior representations, warranties, agreements, arrangements, understandings, and negotiations. THIS NOTE, TOGETHER WITH THE OTHER TRANSACTION DOCUMENTS, REPRESENTS THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF ANY ALLEGED PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES.
- 19. WAIVER OF JURY TRIAL. BORROWER IRREVOCABLY WAIVES ANY AND ALL RIGHTS IT MAY HAVE TO DEMAND THAT ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR IN ANY WAY RELATED TO THIS NOTE OR THE RELATIONSHIPS OF THE PARTIES HERETO BE TRIED BY JURY. THIS WAIVER EXTENDS TO ANY AND ALL RIGHTS TO DEMAND A TRIAL BY JURY ARISING UNDER COMMON LAW OR ANY APPLICABLE STATUTE, LAW, RULE OR REGULATION. FURTHER, BORROWER ACKNOWLEDGES THAT IT KNOWINGLY AND VOLUNTARILY IS WAIVING SUCH PARTY'S RIGHT TO DEMAND TRIAL BY JURY.
  - 20. TIME IS OF THE ESSENCE. Time is of the essence of this Note and each and every provision hereof in which time is an element.
- 21. <u>LIQUIDATED DAMAGES</u>. Lender and Borrower agree that in the event Borrower fails to comply with any of the terms or provisions of this Note, Lender's damages would be uncertain and difficult (if not impossible) to accurately estimate because of the parties' inability to predict future interest rates and other relevant factors. Accordingly, Lender and Borrower agree that any fees, balance adjustments, default interest or other charges assessed under this Note are not penalties but instead are intended by the parties to be, and shall be deemed, liquidated damages.

[Remainder of page intentionally left blank]

Т	N WITNESS WHEDEOF	Borrower has caus	ed this Note to b	a issued as of the	date first set forth above

BORROWER:

# BIORESTORATIVE THERAPIES, INC.

Bv:

Mark Weinreb, President

[Signature Page to Promissory Note]

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### VOID AFTER 5:00 P.M., EASTERN TIME, ON MARCH 1, 2022

NEITHER THIS WARRANT NOR THE WARRANT STOCK (AS HEREINAFTER DEFINED) HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE. THIS WARRANT AND THE WARRANT STOCK MAY BE TRANSFERRED ONLY IN COMPLIANCE WITH THE ACT AND SUCH LAWS. THIS LEGEND SHALL BE ENDORSED UPON ANY WARRANT ISSUED IN EXCHANGE FOR THIS WARRANT.

BIORESTORATIVE THERAPIES, INC.
(Incorporated under the laws of the State of Delaware)
Warrant
Shares March 1, 2017
FOR VALUE RECEIVED, BIORESTORATIVE THERAPIES, INC., a Delaware corporation (the "Company"), hereby certifies that
The number of Common Shares to be received upon the exercise of this Warrant may be adjusted from time to time as hereinafter set forth. The Common Shares deliverable upon such exercise, and as adjusted from time to time, are hereinafter sometimes referred to as "Warrant Stock."
The Holder agrees with the Company that this Warrant is issued, and all the rights hereunder shall be held subject to, all of the conditions, limitations and provision set forth herein.
1. Exercise of Warrant. This Warrant may be exercised by its presentation and surrender to the Company at 40 Marcus Drive, Suite One, Melville, New York 1174 (or such office or agency of the Company as it may designate in writing to the Holder hereof) with the Warrant Exercise Form attached hereto duly executed and accompanied by payment (either in cash or by official bank check, payable to the order of the Company) of the Exercise Price for the number of shares specified in such Form. The Company agrees that the Holder hereof shall be deemed the record owner of such Common Shares as of the close of business on the date on which this Warrant shall have been presented and payment made for such Common Shares as aforesaid whether or not the Company or its transfer agent is open for business. Certificates for the Common Shares supurchased shall be delivered to the Holder hereof within a reasonable time after the rights represented by this Warrant shall have been so exercised. If this Warrant is exercised in part only, the Company shall, upon surrender of this Warrant for cancellation, execute and deliver a new Warrant evidencing the rights of the Holder hereof to purchase the balance of the shares purchasable hereunder.

- 2. Registered Owner. The Company may consider and treat the person in whose name this Warrant shall be registered as the absolute owner thereof for all purposes whatsoever and the Company shall not be affected by any notice to the contrary. Subject to the provisions hereof, the registered owner of this Warrant shall have the right to transfer it by assignment and the transferee thereof, upon his registration as owner of this Warrant, shall become vested with all the powers and rights of the transferor. Registration of any new owner shall take place upon presentation of this Warrant to the Company at its offices together with the Warrant Assignment Form attached hereto duly executed. In case of transfers by operation of law, the transferee shall notify the Company of such transfer and of his address, and shall submit appropriate evidence regarding the transfer so that this Warrant may be registered in the name of the transferee. This Warrant is transferable only on the books of the Company by the Holder on the surrender hereof, duly endorsed. Communications sent to any registered owner shall be effective as against all holders or transferees of this Warrant not registered at the time of sending the communication.
- 3. Reservation of Shares. During the period within which the rights represented by this Warrant may be exercised, the Company shall, at all times, reserve and keep available out of its authorized capital stock, solely for the purposes of issuance upon exercise of this Warrant, such number of its Common Shares as shall be issuable upon the exercise of this Warrant; and if at any time the number of authorized Common Shares shall not be sufficient to effect the exercise of this Warrant, the Company will take such corporate action as may be necessary to increase its authorized but unissued Common Shares to such number of shares as shall be sufficient for such purpose; the Company shall have analogous obligations with respect to any other securities or property issuable upon exercise of this Warrant.
- 4. <u>Fractional Shares</u>. The Company shall not be required to issue certificates representing fractions of Common Shares, nor shall it be required to issue scrip or pay cash in lieu of fractional interests, it being the intent of the Company and the Holder that all fractional interests shall be eliminated.
- 5. <u>Rights of the Holder</u>. The Holder shall not, by virtue hereof, be entitled to any voting or other rights of a stockholder of the Company, either at law or in equity, and the rights of the Holder are limited to those expressed in this Warrant.

### 6. Anti-Dilution Provisions.

- 6.1 Adjustments for Stock Dividends; Combinations, Etc. (a) In case the Company shall do any of the following (an "Event"):
  - (i) declare a dividend or other distribution on its Common Shares payable in Common Shares of the Company,
  - (ii) subdivide the outstanding Common Shares pursuant to a stock split or otherwise,
  - (iii) combine the outstanding Common Shares into a smaller number of shares pursuant to a reverse split or otherwise, or

#### (iv) reclassify its Common Shares,

then the Exercise Price in effect at the time of the record date for such dividend or other distribution or of the effective date of such subdivision, combination or reclassification shall be changed to a price determined by dividing (a) the product of the number of Common Shares outstanding immediately prior to such Event, multiplied by the Exercise Price in effect immediately prior to such Event by (b) the number of Common Shares outstanding immediately after such Event. Each such adjustment of the Exercise Price shall be calculated to the nearest one-hundredth of a cent. Such adjustment shall be made successively whenever any Event listed above shall occur.

- (b) Whenever the Exercise Price is adjusted as set forth in Section 6.1 (whether or not the Company then or thereafter elects to issue additional Warrants in substitution for an adjustment in the number of shares of Warrant Stock), the number of shares of Warrant Stock specified in each Warrant which the Holder may purchase shall be adjusted, to the nearest full share, by multiplying such number of shares of Warrant Stock immediately prior to such adjustment by a fraction, of which the numerator shall be the Exercise Price immediately prior to such adjustment and the denominator shall be the Exercise Price immediately thereafter.
- 6.2 Adjustment for Reorganization, Consolidation or Merger. In case of any reorganization of the Company (or any other entity, the securities of which are at the time receivable on the exercise of this Warrant) after the date hereof or in case after such date the Company (or any such other entity) shall consolidate with or merge with or into another entity, then, and in each such case, the Holder of this Warrant upon the exercise thereof as provided in Section 1 at any time after the consummation of such reorganization, consolidation or merger, shall be entitled to receive, in lieu of the securities and property receivable upon the exercise of this Warrant prior to such consummation, the securities or property to which such Holder would have been entitled upon such consummation if such Holder had exercised this Warrant immediately prior thereto, all subject to further adjustment as provided in Section 6.1; in each such case, the terms of this Warrant shall be applicable to the securities or property receivable upon the exercise of this Warrant after such consummation.
- 7. <u>Investment Intent</u>. Unless, prior to the exercise of this Warrant, the issuance of the Warrant Stock has been registered with the Securities and Exchange Commission pursuant to the Act, the Warrant Exercise Form shall be accompanied by the Investment Representation Letter attached hereto, duly executed by the Holder.

### 8. Restrictions on Transfer.

8.1 Transfer to Comply with the Securities Act of 1933. Neither this Warrant nor any Warrant Stock may be sold, assigned, transferred or otherwise disposed of except as follows: (1) to a person who, in the opinion of counsel satisfactory to the Company, is a person to whom this Warrant or the Warrant Stock may legally be transferred without registration and without the delivery of a current prospectus under the Act with respect thereto and then only against receipt of an agreement of such person to comply with the provisions of this Section 8 with respect to any resale, assignment, transfer or other disposition of such securities; or (2) to any person upon delivery of a prospectus then meeting the requirements of the Act relating to such securities and the offering thereof for such sale, assignment, transfer or disposition.

8.2 <u>Legend</u>. Subject to the terms hereof, upon exercise of this Warrant and the issuance of the Warrant Stock, all certificates representing such Warrant Stock shall bear on the face or reverse thereof substantially the following legend:

"The securities which are represented by this certificate have not been registered under the Securities Act of 1933, and may not be sold, transferred, hypothecated or otherwise disposed of until a registration statement with respect thereto is declared effective under such act, or the Company receives an opinion of counsel for the Company that an exemption from the registration requirements of such act is available."

- 9. <u>Lost, Stolen or Destroyed Warrant</u>. In the event that the Holder notifies the Company that this Warrant has been lost, stolen or destroyed and provides (a) a letter, in form satisfactory to the Company, to the effect that it will indemnify the Company from any loss incurred by it in connection therewith, and/or (b) an indemnity bond in such amount as is reasonably required by the Company, the Company having the option of electing either (a) or (b) or both, the Company may, in its sole discretion, accept such letter and/or indemnity bond in lieu of the surrender of this Warrant as required by Section 1 hereof.
- 10. Notices. All notices required hereunder shall be given by first-class mail, postage prepaid, or overnight mail or courier and, if given by the Holder addressed to the Company at 40 Marcus Drive, Suite One, Melville, New York 11747, Attention: Chief Executive Officer, or such other address as the Company may designate in writing to the Holder; and if given by the Company, addressed to the Holder at the address of the Holder shown on the books of the Company.
- 11. <u>Applicable Law; Jurisdiction</u>. This Warrant is issued under, and shall for all purposes be governed by and construed in accordance with, the laws of the State of Delaware, excluding choice of law principles thereof. The Company and, by its acceptance of this Warrant, the Holder hereby irrevocably consent and submit to the exclusive jurisdiction of any federal or state court located within Nassau or Suffolk County, New York over any dispute arising out of or relating to this Warrant and each party hereby irrevocably agrees that all claims in respect of such dispute or any legal action related thereto may be heard and determined in such courts. Each of the Company and the Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any objection that it or he may now or hereafter have to the laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

	IN WITNESS WHEREOF, the Company has caused this Warrant to be signed on its behalf,	f, in its corporate name, by its duly authorized officer, all as of the day	and
year first	st above written.		
	BIORESTOR	RATIVE THERAPIES, INC.	

Ву:	
	Mark Weinreb Chief Executive Officer
	Chief Executive Officer

# WARRANT EXERCISE FORM

The undersigned hereby irrevocably elects to exercise the within of <b>BIORESTORATIVE THERAPIES</b> , <b>INC.</b> The undersigned here	n Warrant dated as of March 1, 2017 to the extent of purchasing shares of Common Stoelby makes a payment of \$ in payment therefor.
TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]
Signature of Holder	By: Authorized Signatory
Signature of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]
Address(es) of Holder(s)	Address of Holder
Social Security Number(s) of Holder(s)	Tax Identification Number of Holder
Date	Date

# WARRANT ASSIGNMENT FORM

FOR VALUE RECEIVED,	hereby sells, assigns and transfers unto
(please type or print name of assignee) with an address at	the right to purchase shares of Common
Stock of BIORESTORATIVE THERAPIES, INC. (the "Company") represented	d by this Warrant dated as of March 1, 2017 to the extent of shares and does
hereby irrevocably constitute and appoint attorney to transf	er the same on the books of the Company with full power of substitution in the premises.
TO BE COMPLETED BY INDIVIDUAL	TO BE COMPLETED BY CORPORATE,
HOLDER, JOINT TENANTS, TENANTS	PARTNERSHIP, LIMITED LIABILITY
IN COMMON OR AS HOLDERS OF	COMPANY OR TRUST HOLDER
COMMUNITY PROPERTY	
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]
	By:
Signature of Holder	Authorized Signatory
Signature of Holder, if jointly held	Name and Title of Authorized Signatory
	[Please Print]
Date	Date
<u>Signatur</u>	re(s) Guaranteed:

### FORM OF INVESTMENT REPRESENTATION LETTER

BioRestorative Therapies, Inc. 40 Marcus Drive Suite One Melville, New York 11747

emen

In connection with the acquisition of	shares of Common Stock (the "Shares") of BIORESTORATIVE THERAPIES, INC., a Delaward
corporation (the "Company"), by the undersigned from the Company	y pursuant to the exercise of a Warrant, dated as of March 1, 2017, the undersigned does hereby represen
and warrant to the Company as follows:	

- (a) The undersigned represents and warrants that the Shares acquired by it are being acquired for its own account, for investment purposes and not with a view to any distribution within the meaning of the Securities Act of 1933, as amended (the "Securities Act"). The undersigned will not sell, assign, mortgage, pledge, hypothecate, transfer or otherwise dispose of any of the Shares unless (i) a registration statement under the Securities Act with respect thereto is in effect and the prospectus included therein meets the requirements of Section 10 of the Securities Act, or (ii) the Company has received a written opinion of its counsel that, after an investigation of the relevant facts, such counsel is of the opinion that such proposed sale, assignment, mortgage, pledge, hypothecation, transfer or disposition does not require registration under the Securities Act or any state securities law.
- (b) The undersigned understands that the resale of the Shares is not, and is not being, registered under the Securities Act and the Shares must be held indefinitely unless they are subsequently registered thereunder or an exemption from such registration is available.
- (c) The undersigned recognizes that the acquisition of the Shares involves a high degree of risk and is suitable only for persons of adequate financial means who have no need for liquidity with respect to the Shares in that (a) it may not be able to liquidate the Shares in the event of emergency; (b) transferability is extremely limited; and (c) it could sustain a complete loss of its investment.
- (d) The undersigned represents and warrants that it (a) is competent to understand and does understand the nature of its investment; and (b) is able to bear the economic risk of an acquisition of the Shares.

- (e) The undersigned represents and warrants that it is an "accredited investor," as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act. The undersigned meets the requirements of at least one of the suitability standards for an "accredited investor" as set forth on the Accredited Investor Certification attached hereto.
- (f) The undersigned has reviewed the Company's filings with the Securities and Exchange Commission, including the risk factors set forth therein, and has been afforded the opportunity to obtain such information regarding the Company as it has reasonably requested to evaluate the merits and risks of the undersigned's investment in the Shares. No oral or written representations have been made or oral information furnished to the undersigned or its advisers in connection with the investment in the Shares.
- (g) The undersigned confirms that the representations and warranties set forth in the Subscription Agreement pursuant to which the Warrant was issued are true and correct as of the date hereof as if made on and as of the date hereof with respect to the purchase of the Shares.
- (h) The undersigned acknowledges that counsel to the Company will be relying, and may rely, upon the foregoing in connection with any opinion of counsel it may give with regard to the issuance of the Shares by the Company to the undersigned, and any subsequent transfer of the Shares by the undersigned, and agrees to advise the Company and its counsel in writing in the event of any change in any of the foregoing.

Very truly yours,

TO BE COMPLETED BY INDIVIDUAL HOLDER, JOINT TENANTS, TENANTS IN COMMON OR AS HOLDERS OF COMMUNITY PROPERTY	TO BE COMPLETED BY CORPORATE, PARTNERSHIP, LIMITED LIABILITY COMPANY OR TRUST HOLDER
Name(s) of Holder(s) [Please Print]	Name of Holder [Please Print]
Signature of Holder	By: Authorized Signatory
Signature of Holder, if jointly held	Name and Title of Authorized Signatory [Please Print]

Date

Date

### WARRANT EXERCISE

# **Accredited Investor Certification**

(Initial the appropriate box(es))

The undersigned represents and warrants that it, he or she is an "accredited investor" based upon the satisfaction of one or more of the following criteria:
 (1) he or she is a natural person who has a net worth or joint net worth with his or her spouse in excess of \$1,000,000 at the time of his or her purchase 1; or
 (2) he or she is a natural person who had an individual income in excess of \$200,000 in each of the two most recent years or a joint income with his or her spouse in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year; or
 (3) he or she is a director or executive officer of the Company; or
 (4) it is either (a) a bank as defined in Section 3(a)(2) of the Securities Act or a savings and loan association or other institution as defined in Section 3(a)(5)(A) of the Securities Act, whether acting in its individual or fiduciary capacity, (b) a broker or dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934, (c) an insurance company as defined in Section 2(13) of the Securities Act, (d) an investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a)(48) of such act, (e) a small business investment company licensed by the United States Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958, (f) a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000 or (g) an employee benefit plan within the meaning of Title I of the Employee Retirement Income Security Act of 1974, if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such act, which plan fiduciary is a bank, savings and loan association, an insurance company or a registered investment advisor, or if the employee benefit plan has total assets in excess of \$5,000,000 or, if a self-directed plan, with investment decisions made solely by persons who otherwise meet these suitability standards; or

<sup>&</sup>lt;sup>1</sup>For purposes of calculating net worth:

<sup>(</sup>i) The undersigned's primary residence shall not be included as an asset;

<sup>(</sup>ii) Indebtedness that is secured by the undersigned's primary residence, up to the estimated fair market value of the primary residence at the date hereof, shall not be included as a liability (except that if the amount of such indebtedness outstanding at the date hereof exceeds the amount outstanding 60 days before the date hereof, other than as a result of the acquisition of the primary residence, the amount of such excess shall be included as a liability); and

<sup>(</sup>iii) Indebtedness that is secured by the undersigned's primary residence in excess of the estimated fair market value of the primary residence at the date hereof shall be included as a liability.

(5) it is a private business development company as defined in Section 202(a	a)(22) of the Investment Advisers Act of 1940; or				
(6) it is an organization described in Section 501(c)(3) of the Internal Reven partnership not formed for the specific purpose of acquiring the Shares offer	tue Code of 1986, as amended, a corporation, a Massachusetts or similar business trust or a ed hereby, with total assets in excess of \$5,000,000; or				
	(7) it is a trust, with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the Shares, whose purchase is directed by a sophisticated person who has such knowledge and experience in financial and business matters that he or she is capable of evaluating the merits and risks of the prospective investment; or				
(8) it is a corporation, partnership or other entity, and each and every equity it, he or she certifies that it, he or she meets the qualifications set forth in eit	owner of such entity initials a separate Accredited Investor Certification pursuant to which her (1), (2), (3), (4), (5), (6) or (7) above.				
If the Warrant Holder is an INDIVIDUAL, or if the Shares are being acquired as JOINT TENANTS, as TENANTS IN COMMON, or as COMMUNITY PROPERTY:	If the Warrant Holder is a PARTNERSHIP, CORPORATION, LIMITED LIABILITY COMPANY or TRUST:				
Name(s) of Warrant Holder	Name of Warrant Holder				
Signature of Warrant Holder	By: Signature of Authorized Representative				
Signature, if jointly held	Name and Title of Authorized Representative				
Date	Date				

# LIST OF SUBSIDIARIES

Name of Subsidiary	Jurisdiction of Incorporation/Organization	
Stem Cell Cayman Ltd. Stem Pearls, LLC	Cayman Islands New York	

### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in the Registration Statements of BioRestorative Therapies, Inc. (the "Company") on Form S-8 (File Nos. 333-196299, 333-203310, 333-210555 and 333-214621) of our report dated March 21, 2017, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of BioRestorative Therapies, Inc. as of December 31, 2016 and 2015 and for the years then ended, which report is included in this Annual Report on Form 10-K of BioRestorative Therapies, Inc. for the year ended December 31, 2016.

/s/ Marcum LLP		
Marcum LLP		
New York, NY		
March 21 2017		

#### SECTION 302 CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

### I, Mark Weinreb, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of BioRestorative Therapies, Inc.
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 21, 2017 /s/ Mark Weinreb

Mark Weinreb Principal Executive Officer

#### SECTION 302 CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

### I, Mark Weinreb, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of BioRestorative Therapies, Inc.
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 21, 2017 /s/ Mark Weinreb

Mark Weinreb Principal Financial Officer

### CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

### AND PRINCIPAL FINANCIAL OFFICER

#### **PURSUANT TO**

### 18 U.S.C. SECTION 1350,

### AS ADOPTED PURSUANT TO

### SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, the undersigned officer of BioRestorative Therapies, Inc. (the "Company") hereby certifies that the Company's Annual Report on Form 10-K for the year ended December 31, 2016 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 21, 2017

/s/ Mark Weinreb

Mark Weinreb Principal Executive Officer and Principal Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.