ADVANCED CELL TECHNOLOGY, INC.
Form 10-K
April 01, 2014

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2013

OR

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

For the transition period from _____ to _____

Commission file number 0-50295

ADVANCED CELL TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware	**87-0656515**
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	**(I.R.S. EMPLOYER IDENTIFICATION NO.)**

33 Locke Drive, Marlborough, Massachusetts 01752
(508) 756-1212

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

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

None.
(Title of Class)

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $0.001 par value per share
(Title of Class)

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

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

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

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

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

The aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant (based upon the closing price of $0.08 for the registrant's Common Stock as of June 30, 2013) was approximately $198 million (based on 2,473,003,251 shares of common stock outstanding and held by non-affiliates on such date). Shares of the registrant's Common Stock held by each executive officer and director and by each entity or person that, to the registrant's knowledge, owned 10% or more of the registrant's outstanding Common Stock as of June 30, 2013 have been excluded in that such persons may be deemed to be affiliates of the registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the registrant's Common Stock, $0.001 par value, was 2,776,983,176 shares as of March 4, 2014.

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EXPLANATORY NOTE REGARDING RESTATEMENT

In this Annual Report on Form 10-K, the terms "Advanced Cell Technology," "the Company," "we," "us," and "our" refer to Advanced Cell Technology, Inc. and its subsidiaries, and any subsidiary that may be acquired or formed in the future.

Advanced Cell Technology and the Advanced Cell Technology logo are registered trademarks of a Advanced Cell Technology. This Annual Report on Form 10-K also includes the registered and unregistered trademarks and service marks of other persons.

This Annual Report on Form 10-K for the fiscal year ended December 31, 2013, includes restatement of the following previously filed consolidated financial statements and data (and related disclosures): (1) our consolidated balance sheet as of December 31, 2012, and the related consolidated statements of operations, stockholders' deficit, and cash flows for each of the fiscal years ended December 31, 2011 and 2012; (2) our selected financial data as of and for our fiscal years ended December 31, 2009, 2010, 2011, and 2012, located in Part II, Item 6 of this Annual Report on Form 10-K; (3) our management's discussion and analysis of financial condition and results of operations as of and for our fiscal years ended December 31, 2011 and 2012, contained in Part II, Item 7 of this Annual Report on Form 10-K; and (4) our unaudited quarterly financial information for each quarter in our fiscal years ended December 31, 2011 and December 31, 2012, and for the first three quarters in our fiscal year ended December 31, 2013, in Note 19, "Summarized Quarterly Unaudited Financial Data (Restated)" of the Notes to Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

We have completed our previously announced internal accounting review related to the recording of a warrant liability and associated embedded derivative instrument for warrant anti-dilution protection contained in two Warrant Agreements entered into in September 2005. Each warrant contained an anti-dilution protection provision in effect from May 2005 until January 15, 2009, or the Pricing Period. It has been determined that additional shares are contractually due to the holders of these Warrant Agreements as a result of certain equity issuances that occurred during the Pricing Period and appear to have triggered anti-dilution protection per the Warrant Agreement. The equity issuances in question took place during the Pricing Period and the resulting contractual share obligation due to the holders were never issued and remain unsettled as of the filing of this Annual Report. These unsettled shares represent a liability to us and as a result we have recorded a fair value liability for these shares from January 2009 through the end of this reporting period December 31, 2013.

We subsequently examined periods being restated for the warrant liability issue to determine if authorized, unissued share availability was an issue in relation to instruments that have share based settlement requirements. Through this analysis it was determined that in the first quarter of 2009, second quarter of 2009 and fourth quarter of 2011 options outstanding were impacted by the lack of authorized, unissued shares available. As per the accounting requirements of ASC 718, the inadequate share issue caused the accounting to change from equity based to liability based accounting,

with the vested options to be measured at fair value as a liability until such time as adequate shares were approved and the accounting for the stock compensation would revert back to equity based accounting.

This accounting error in treating the stock compensation as equity throughout these periods with inadequate authorized unissued shares, led the Company to re-measure all stock options impacted during these periods to effect the proper accounting treatment.

Accordingly, we have restated our financial statements to reflect the fair value of this unsettled liability for 2009 through the third quarter of 2013 and to adjust the stock option compensation accounting for the periods impacted. The restatement will result in a cumulative impact on our net loss of an additional loss of approximately $1.0 million for the period beginning in the first quarter of 2009 through the third quarter of 2013 and an increase to our liabilities of approximately $1.3 million and a decrease to our additional paid in capital of approximately $0.3 million at September 30, 2013. The impact to net loss throughout the periods is a non-cash expense item.

Financial information included in the Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed by us prior to March 10, 2014, and all earnings, press releases, and similar communications issued by us prior to March 10, 2014, should not be relied upon and are superseded in their entirety by this Annual Report on Form 10-K. We have not amended any previously filed reports.

For more information regarding the restatement, please refer to Part II, Item 6, “Selected Financial Data”; Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations”; Note 2, “Restatement of Previously Issued Consolidated Financial Statements,” and Note 19, “Summarized Quarterly Unaudited Financial Data (Restated),” of the Notes to Consolidated Financial Statements in Part II, Item 8; and Part II, Item 9A, “Controls and Procedures.”

CAUTIONARY STATEMENT RELATING TO FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K and the information incorporated by reference includes ‘‘forward-looking statements’’ All statements regarding our expected financial position and operating results, our business strategy, our financing plans and the outcome of any contingencies are forward-looking statements. Any such forward-looking statements are based on current expectations, estimates, and projections about our industry and our business. Words such as ‘‘anticipates,’’ ‘‘expects,’’ ‘‘intends,’’ ‘‘plans,’’ ‘‘believes,’’ ‘‘seeks,’’ ‘‘estimates,’’ or variations of those words and similar e intended to identify such forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those stated in or implied by any forward-looking statements.

Forward-looking statements are only current predictions and are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry’s actual results, levels of activity, performance, or achievements to be materially different from those anticipated by such statements. These factors include, among other things, those listed under “Risk Factors” in Item 1A of Part I of this Annual Report on Form 10-K and elsewhere in this Annual Report on Form 10-K. These and other factors could cause results to differ materially from those expressed in these forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements contained in this Annual Report on Form 10-K are reasonable, we cannot guarantee future results, performance, or achievements. Except as required by law, we are under no duty to update or revise any of such forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this Annual Report on Form 10-K.

Unless otherwise indicated, information contained in this Annual Report on Form 10-K concerning our clinical trials, therapeutic candidates, number of patients that may benefit from these therapeutic candidates and the potential commercial opportunity for our therapeutic candidates, is based on information from independent industry analysts and third-party sources (including industry publications, surveys, and forecasts), our internal research, and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and based on assumptions made by us based on such data and our knowledge of such industry, which we believe to be reasonable. None of the sources cited in this Annual Report on Form 10-K has consented to the inclusion of any data from its reports, nor have we sought their consent. Our internal research has not been verified by any independent source, and we have not independently verified any third-party information. While we believe that such information included in this Annual Report on Form 10-K is generally reliable, such information is inherently imprecise. In addition, projections, assumptions, and estimates of our future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors” in Item 1A of Part I of this Annual Report on Form 10-K and elsewhere in this Annual Report on Form 10-K. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

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PART I

Item 1. Business.

Overview

Advanced Cell Technology, Inc., a Delaware corporation (the "Company", "ACT", "we", "us", or "our") is a biotechnology company, engaged in the development and commercialization of human pluripotent stem cell technology in the field of regenerative medicine. We are actively conducting clinical trials for treating dry age-related macular degeneration and Stargardt's macular degeneration, in addition to several clinical and preclinical programs for other ocular therapies. We also have a preclinical development pipeline in areas outside of ophthalmology, including; autoimmune diseases, inflammatory diseases, and wound healing. Our intellectual property portfolio includes pluripotent human embryonic stem cell, or hESC; induced pluripotent stem cell, or iPSC, platforms; and other cell therapy research programs. Our corporate headquarters and principle laboratory and manufacturing facilities are located in Marlborough, Massachusetts.

Key Management Updates

During 2013 and early 2014 there were a number of key changes to our management team. In June 2013, Edward Myles joined us as Chief Financial Officer and Executive Vice President of Corporate Development. In January 2014, Eddy Anglade, MD, joined our company as Executive Vice President of Clinical Development. In January 2014, we also announced the departure of our Chief Executive Officer, effective immediately. Edward Myles was named interim President.

An Overview of Regenerative Medicine

During the last century, efforts toward preventing and battling disease frequently focused on the use of drugs, specifically small molecules and protein therapeutics designed to somehow alter or slow the course of a disease by affecting how a cell or a group of cells behave. This pharmacological approach has played, and will continue to play, an invaluable role in efforts to ensure a long and healthy life. It has led to the development of drugs that can combat infection, slow down cancer progression, and help in a myriad of diseases. Yet, even with this large and complex arsenal of drugs, there are many occasions where this type of medicine falls short.

Our business focus is the development of new therapies in the field of regenerative medicine. Regenerative medicine is defined as the process of replacing or "regenerating" human cells, tissues or organs to restore or establish normal function and has been called the "next evolution of medical treatments" and “the vanguard of 21st century healthcare” by the U.S. Department of Health and Human Services.

Cell therapies, such as those we are developing, offer a potentially complete solution for complex physiologic processes in ways, or through mechanisms, which are not expected to be attainable using traditional small-molecule or protein therapeutics. This field holds the potential to regenerate damaged tissues and organs in the body by replacing damaged tissue or by stimulating the body's own repair mechanisms to heal tissues or organs. By altering the course of disease, regenerative medicine could make it possible to eliminate the need for daily therapies, reduce hospitalizations and avert expensive medical procedures, thus enabling patients to lead healthier and more productive lives. Regenerative medicine, such as those therapies we are developing, could provide more effective solutions or potential cures for a broad range of inflammatory and autoimmune diseases, and provide meaningful advances for a range of other chronic, orphan, and aging-related conditions that traditional medicine has to date been unable to treat and that represent a quality-of-life and economic burden on society.

The necessity for regenerative medicine, including cell therapies, arises as a consequence to the rapidly growing numbers of people over the age of 65. The age structure of the overall population is projected to change greatly over the next 40 years. Between now and 2050 the world is projected to experience rapid growth in its older population.

Figure 1 shows the projected growth of two groups of older people – those aged 65-79 and those 80 years and older.

By 2050, the number of people over the age of 65 living in developed countries is projected to exceed 325 million; when including developing countries, this number rises to 1.5 billion – a near tripling of the over 65 population as compared to today. In the United States, as an example, the number of Americans aged 65 and older is projected to be 88.5 million in 2050, more than double the population of 40.2 million in 2010. The U.S. population is projected to grow to 439 million by 2050, an increase of 42 percent relative to the 2010 census numbers of 310 million. The population is also expected to become much older. Those over the age of 85 accounted for 5.8 million Americans in the 2010 census, and are expected to reach 8.7 million by 2030 and then 19 million by 2050.

Chronic diseases and impairments, which are among the leading causes of disability in older people, can negatively impact quality of life, lead to a decline in independent living, and impose an economic burden on patients. About 80 percent of seniors in developed countries have at least one chronic health condition and 50 percent have at least two. According to the Centers for Disease Control, of the roughly 150,000 people who die each day, about two-thirds die of age-related causes. In industrialized nations, the proportion is much higher, reaching 90%. Concern is growing that medical advances leading to longevity will in turn lead to an older population who have a higher incidence of functional and cognitive impairment. As Figure 2 illustrates, as life expectancy increases so does the incidence of certain chronic and degenerative health conditions, threatening to create a wider gap between healthy life expectancy and total life expectancy.

Currently, the majority of treatments for chronic and/or life-threatening diseases are palliative, meaning they merely treat the symptoms rather than cure the underlying cause. Others delay disease progression and the onset of complications associated with the underlying illness. Only a very limited number of therapies available today are capable of curing or significantly changing the course of disease. The result is a healthcare system burdened by costly treatments for an aging, increasingly ailing population, with few solutions for containing rising costs. Figure 3 demonstrates the predicted impact that our aging population is expected to have on the cost of healthcare in less than 20 years. The demographic shift in aged populations towards older adults in the United States alone will likely add more than one trillion dollars to the direct cost of healthcare, and multiples of that amount for the indirect costs associated with accommodating the needs of older Americans. According to a June 2009 report from the Council of Economic Advisers to the White House, health care expenditures in the United States are currently about 18 percent of GDP, and this share is projected to rise sharply. If health care costs continue to grow at historical rates, the share of GDP devoted to health care in the United States is projected to reach 34 percent by 2040.

Regenerative medicine has the potential to change the thinking about disease, aging, and even the practice of medicine itself – and, to help potentially reduce continuously growing health care costs. The best way to address the escalating economics of healthcare includes developing more effective treatments, and even cures, for the most burdensome diseases (such as diabetes, neurodegenerative disorders, stroke and cardiovascular disease) which may help to facilitate longer, healthier and more productive lives. We believe our therapeutic programs, some of which are intended to treat examples of these burdensome diseases, such as macular degeneration, will contribute to the medical community's response to this growing problem. Our regenerative cell therapies currently in development may have both therapeutic benefit and provide meaningful reduction to the otherwise-predicted increase in healthcare costs resulting from aging. We believe those factors may help us obtain favorable pricing and reimbursement considerations for our therapies.

Pluripotent Stem Cell Platforms

We believe that pluripotent stem cells offer us the opportunity to help meet the needs of a potentially large market for cellular therapy regenerative medicine, while solving the issues around logistics of producing appropriate numbers of dosages in a cost effective manner.

In general, there are two broad categories of stem cells: adult stem cells and pluripotent stem cells. The term "stem cells" describe all of the cells that can give rise to the different cells found in tissues. A common feature to all stem cells is the ability to both replicate (propagate) as well as differentiate into two or more different mature cell types. There are however, differences between adult and pluripotent stem cells. Adult stem cells are derived from various tissues in the human body and are typically limited in the diversity of other cell types they can become, usually only able to produce two or three different types of mature cells. Adult stem cells also are often limited in their ability to divide and renew in culture before ceasing to grow. In contrast, pluripotent stem cells are often termed "true" stem cells because they have the potential to differentiate into almost any cell in the body, and have a near infinite capacity to replicate. Pluripotent stem cells can potentially provide a renewable source of healthy cells and tissues to treat a wide array of diseases, making pluripotent stem cells an important aspect to our strategy in the development of effective cellular therapies that can be used in a globally scalable manner.

A principle focus for us is on cell therapies that can be derived from pluripotent stem cell stocks and delivered to patients in a manner that does not require the need to match donor and recipient. That is, the cells from the same pluripotent stem cells can be used in any patient. This type of cell therapy is referred to as "allogeneic". This permits the use of a single master stem cell bank in the manufacturing of the therapeutic doses to be used such that one uniform source of starting cells can be readily controlled for consistency, lack of infectious agents and cleared by regulatory agencies. The pluripotent stem cell approach also permits the use of cell culturing and manufacturing techniques that we believe will prove to be less costly and intrinsically more scalable than the high-touch process that otherwise characterize the majority of "autologous" (donor and recipient are the same) cell therapies.

Pluripotent stem cells presently include two distinct cell types: (1) embryonic stem, or ES, cells and (2) induced pluripotency stem, or iPS, cells which have ES-like properties.

Embryonic Stem Cell Platform

An hESC line represents a potentially inexhaustible supply of pluripotent cells. Derived from a single cell, the replicative capacity of an hESC line could be very significant. Embryonic stem cells have specific properties that make them particularly useful for cell-based therapies. Because they are able to differentiate into all of the more than 200 types of cells in the human adult body, they may offer significant therapeutic potential. ACT has been focused on hESC research and development, both in terms of derivation of transplantable tissues for therapeutic purposes, as well as the development of ethically-compliant embryonic stem cell lines.

Our proprietary method utilizes a process called “single cell biopsy” to remove a single cell, called a “blastomere” from a very early stage embryo (that is only four to eight cells in size) in a manner which does not result in the destruction of the pre-embryo nor cause it any harm. While the overall process for deriving hESC lines from single blastomeres is proprietary to our Company, and covered by several issued patents in the U.S. and other major markets, the underlying single-cell biopsy technique itself has been used routinely for more than a decade by *in vitro* fertilization, or IVF, clinics as part of a process called pre-implantation genetic diagnostics, or PGD. In those IVF clinics, single cells are removed from cell pre-embryos and tested for genetic and chromosomal abnormalities, and embryos which pass PGD screening can then be used for implantation. The single cell biopsy process is not only non-destructive, but had been determined to be a process which does not subject the pre-embryo to any undue risk of harm. PGD is used routinely as part of IVF processes resulting in the birth of thousands of children every year, and the safety of the single-cell biopsy technique has been examined in several large-scale clinical studies and determined to have no deleterious effect on the outcome of the IVF process.

iPSC Platform

iPSCs are adult cells that have been genetically or environmentally reprogrammed to an embryonic stem cell-like state by being genetically manipulated to express genes and factors important for maintaining the defining properties of embryonic stem cells. The reprogramming of adult cells into embryonic stem cells enables the generation of patient-specific stem cells and thus has potential for the treatment of degenerative diseases. Given that iPSCs can be made in a patient-specific manner, the ultimate goal for iPSC-derived tissues and differentiated cells is that these can be transplanted back into the same patient without rejection, and so might be used in treatment settings where donor-recipient matching would otherwise be necessary to prevent rejection of the transplanted cells.

We believe that iPSCs hold promise in future manufacturing processes for certain cell therapies. iPSCs are similar to natural pluripotent stem cells, such as embryonic stem cells, in many aspects, but the full extent of their relation is still being assessed. The challenge around iPSCs is to better define differences in the epigenetics and gene expression of the resulting cells and subsequently improving the reprogramming methods in order to make iPSCs a truly tractable alternative to hESCs. In the coming years, the efficiency of generating iPSCs and the understanding of the mechanisms of cell programming and reprogramming may improve to a point where we may be able offer iPSC-derived cell therapies more generally, in addition to hESC-derived therapies.

Our Cell Therapy Research Programs

Our research in the cellular therapies area includes projects focusing on developing many different cell types that may be used to treat a range of diseases across several therapeutic categories. We pursue a variety of approaches to generating transplantable tissues both in-house and through collaborations with other researchers who have particular interests in, and skills related to, cellular differentiation. Control of differentiation and the culture and growth of stem and differentiated cells are also important current areas of research for us. Our current development pipeline is presented below:

Ophthalmology Programs

Chronic diseases of the eye are common globally, particularly in aging populations. The recent success of palliative therapies in the wet age-related macular degeneration market highlights the therapeutic and commercial potential of this sector. This is underscored by large pharmaceutical and global biotech companies that have either recently repositioned themselves through further emphasis in funding and/or acquiring ophthalmology programs, or entering

ophthalmology for the first time, as the industry comes to appreciate the potential size of this market and its projected growth rate, largely as a consequence of an aging population. These companies include, as examples, Bayer Healthcare, GlaxoSmithKline, Pfizer, Novartis and Roche. Despite this growing interest, several disease areas of ophthalmology remain underserved by prescription pharmaceuticals.

A significant unmet medical need relates to diseases affecting the back of the eye, such as age-related macular degeneration as well as other forms of macular degeneration, diabetic retinopathy and retinitis pigmentosa. Inflammatory diseases such as uveitis, and vision loss from photoreceptor and other neurosensory retinal damage due to glaucoma, also represent significant patient populations for which effective therapies have remained elusive. These conditions have been under-served primarily because of their pathophysiological complexity, which the development of new drugs – traditional small molecule and biologics – has been unable to solve. We are developing a pipeline of stem cell derived therapeutics which may have use as treatment for degenerative diseases of the eye. In some instances, stem cell derived therapies may repair and replace damaged tissue in the eye, permitting restoration of otherwise lost vision. As our understanding of the underlying pathophysiology of ocular disease increases, we believe we will have additional opportunities to develop other therapeutic products for the ophthalmology market.

Macular Degeneration Programs

The largest indication involving macular degeneration is “age-related macular degeneration”, or AMD. AMD is the leading cause of blindness and visual impairment in adults over fifty years of age. It is estimated that the clinically detectable AMD patient population in North America and Europe includes about 25-30 million people across the range of disease, from early-stage to late-stage, or legal blindness. AMD represents one of the largest unmet medical needs in medicine today in terms of the lack of useful therapeutics. There is an exponential rise in prevalence and incidence rates with age, with the prevalence rates of late-stage AMD quadrupling every decade of life after the age of 40. Based on population aging trends, a recent article in the journal *Lancet* has projected that globally the number of people with AMD in 2020 will be about 196 million, increasing to 288 million by 2040.

Retinal pigment epithelium, or RPE, is a single layer of pigmented cells that form part of the blood/ocular barrier. The presence and integrity of the RPE layer is required for normal vision. Retinal pigment epithelial cells are positioned between the photoreceptor cell layer of the retina and the Bruch's membrane and choroid, a layer filled with blood vessels. Because the photoreceptors see no direct blood supply, it is the role of the RPE layer to transport nutrients and oxygen to the photoreceptor cells, as well as to supply, recycle, and detoxify products involved with the phototransduction process – the process by which the photoreceptors turn light into a signal to be propagated along the optic nerve to the brain. In particular, the RPE layer serves as the transport layer that maintains the structure of the photoreceptor environment by acting as an intermediary between the nerve layer and blood vessels, supplying small molecules, transporting ions and water from the blood vessels to the photoreceptor layer. The RPE takes up nutrients such as glucose, retinol (Vitamin A), and fatty acids from the blood and delivers these nutrients to photoreceptors. The RPE layer also prevents the buildup of toxic metabolites around the nerve cells by transporting the metabolites to the blood. In addition, the RPE is able to secrete a variety of growth factors helping to maintain the structural integrity and organization of the photoreceptors.

Maintenance of the Bruch's membrane, which serves as a natural anti-angiogenic barrier that prevents the capillary bed of the choroid from invading and disrupting the photoreceptor and nerve microarchitecture of the retina, is also an important function of the RPE layer. RPE cells also recycle proteins and other components involved in a process is known as the visual cycle of retinal, which isomerizes all trans-retinol to 11-cis retinal – the latter of which is required by photoreceptors for vision. A failure of any one of these functions of the RPE layer can lead to degeneration of the retina, loss of visual function, and blindness. Dysfunction and degeneration of the RPE layer is in fact implicated in many disease processes, the most prominent being various forms of macular degeneration.

As the name implies, age-related macular degeneration usually affects older adults, with loss of central vision required for reading, driving and other important activities of daily living due to chronic damage of the central retina. It occurs in "dry" (aka “atrophic” or “geographic”) and "wet" (aka “neovascular” or “exudative”) forms. In the case of dry AMD, the disease process appears to begin with loss of RPE cells (cell death) followed by some period of photoreceptor atrophy and inactivity, and after sufficient time, photoreceptor death. For most dry AMD patients, gradual loss of central vision occurs first. Wet AMD is an end-stage manifestation seen in approximately 10% of dry AMD patients, with the loss of the RPE layer and its ability to maintain the Bruch’s membrane function as a barrier resulting in failure of the membrane’s integrity and new blood capillaries penetrating into the photoreceptor space with ensuing rapid loss of vision. In addition to AMD, there are nearly 200 other forms of macular degenerative diseases which, even if the underlying causes are different, appear to follow a similar course of RPE loss followed by atrophy, inactivity and ultimately death of the photoreceptor. These include, for example, an inherited juvenile onset form of macular degeneration called Stargardt’s Macular Degeneration, or SMD.

It had been reported in scientific journal articles that a portion of the RPE layer can be transplanted from one part of the eye to the macula to allow rescue of photoreceptor function. In some instances, the investigators demonstrated that photoreceptors appeared present but were not functional, apparently due to the loss of an adjacent functional RPE layer. However, transplantation of a healthy RPE layer to the macula enabled photoreceptor function. Although limited in its potential as a therapeutic modality, RPE translocation is an important proof-of-principle regarding the use of the retinal pigment epithelium as treatment for vision loss secondary to macular degeneration.

Our research has indicated that RPE cells generated from pluripotent stem cell sources, such as an hESC line, could potentially solve the sourcing of transplantable RPE cells for treating macular degenerative conditions. It is likely that the area in which the RPE layer exists will maintain its relative immune-privilege in dry AMD patients, meaning that donor matching is not likely to be a significant limitation so that a single and scalable allogeneic source of RPE cells, one that can be manufactured in culture, might provide a therapeutic solution for the millions of patients affected by this disease. We have created a GMP-compliant hESC master stem cell bank and a GMP protocol for scaled-up manufacturing of human RPE cells from our hESC master bank. Extensive animal testing of the human RPE cells generated in culture has been conducted and has established that when injected into the eyes of test animals as a suspension of cells, the human RPE cells were able to home to areas of damage in the RPE layer, with engraftment and recapitulation of the correct anatomical structure in the back of the eye of the animals. As published in *Stem Cells*, we have also demonstrated that in animal models of macular degeneration, not only did the human RPE cells reform the correct structure, but also that the injection of the cells resulted in preservation of the photoreceptor layer and its function. That is, the injected human RPE cells repaired and restored the function of the RPE layer in animal models of disease.

This data, along with safety data we collected on the human RPE cells, or (our RPE Program), formed the basis of several Investigative New Drug, or IND, applications filed and approved by the U.S. Food and Drug Administration, or FDA, and an Investigational Medicinal Product Dossier, or IMPD, approved by the U.K. Medicines and Healthcare Products Regulatory Agency. In the U.S., one of our ongoing clinical trials is a Phase 1/2 study for treating dry AMD patients by injection of RPE cells made in culture from an hESC line. We are also conducting Phase 1/2 studies in both the U.S. and the U.K. for the treatment of SMD patients using the RPE cell injections. As described in greater detail below, a total of 34 patients have been treated as of March 27, 2014 in these three clinical trials.

We are conducting these three trials in cooperation with leading retinal surgeons at the top eye hospitals in the U.S. and the U.K. including: Jules Stein Eye Institute (UCLA), Wills Eye Institute, Bascom Palmer Eye Institute (University of Miami) and Massachusetts Eye and Ear Infirmary. The U.K. study is being led by investigators at Moorfields Eye Hospital in London. To ensure patient safety, the trials are being overseen by an independent Data Safety and Monitoring Board, or DSMB also comprised of leading retinal surgeons.

The design of the three ongoing trials is similar. Each is an ascending dosage trial, with review of each dosing group by the DSMB, and were originally designed to have enrolled a total of twelve patients in each. The first patients were treated July 2011. Upon reaching the halfway point for all three trials (the dosing of a total of 18 patients) without any adverse events associated with the injection of the RPE cells, approval was granted by the FDA to enroll earlier stage patients in the two U.S. studies. Under the amended protocol, patients with better vision, a visual acuity of 20/100, have been enrolled and treated. The chart below shows patient information on our current clinical trials, as of March 27, 2014:

We believe that the results from the SMD and dry AMD clinical trials, though very preliminary and representing a limited number of patients in an open-label study design, are promising. Preliminary results for the first dry AMD and first SMD patient were published in early 2012 in the *Lancet*. Since that publication, 32 additional patients have been treated (bringing the totals to 22 SMD patients and 12 dry AMD patients). There have been no serious adverse events due to the injected RPE cells, which is the primary endpoint of the Phase 1 aspect of these studies. The trial sites have provided regular follow-up on all of the patients, and have been able to include data relating to the engraftment and persistence of the injected cells as well as impacts on visual acuity. The preliminary data suggest that the injected cells are well tolerated and appear generally to be capable of engrafting at the site of injection, forming the appropriate anatomical monolayer structure around the injected area. Visual acuity improvement was observed to varying degrees in several of these very late-stage patients, a result that was not anticipated in the original design of these studies.

In February 2013, we announced that our clinical partner, the Jules Stein Eye Institute at the University of California, Los Angeles had received approval of its Investigator IND Application to initiate a Phase 1/2 study using our RPE cells to treat myopic macular degeneration, or MMD, a form of macular degeneration that can occur in association with severe forms of myopia. Myopia, or nearsightedness, is the most common eye disorder in the world, and is a significant global public health concern. MMD is an important world-health issue lacking safe and effective treatments. Overall, MMD is reported to be the seventh ranking cause of legal blindness in the United States, the fourth ranking cause in Hong Kong and the second in parts of China and Japan.

MMD seems to be associated with stress on the RPE layer as a consequence to elongation of the eyeball structure in myopic patients. The stress can induce fissures in the RPE layer, leading to RPE cell death and ultimately macular dystrophy and degeneration. We are in the final stages of completing all of the necessary paperwork with Jules Stein Eye Institute and UCLA so that we can begin treating patients in this trial.

As we continue to manage our clinical trials and expand the indications for which our RPE cell therapy is being investigated, we have also begun to take the steps to define our final product formulation, as well as to lay the early ground work to support appropriate pricing and reimbursement programs. We believe that our RPE therapy provides pricing justification across all categories of consideration by Medicare, Medicaid, National Health Service (UK) and private payers. Our SMD program has been granted Orphan Drug status in both the U.S. and Europe, which could accordingly lead to accelerated regulatory approval, potential FDA grant opportunities, and opportunities for early and favorable pricing considerations.

Photoreceptor Progenitor Program

Photoreceptors mediate the first step in vision, capturing light and turning that into nerve signals to the brain. Rod photoreceptors are active in dim light, while cone photoreceptors are active in bright light and are required for color vision. The photoreceptor atrophy, and subsequent cell death and permanent loss of photoreceptors is seen in later stages of AMD. Loss of photoreceptors is also a consequence to diseases such as diabetes, retinitis pigmentosa, and elevated intraocular pressure typically associated with glaucoma, and represents additional and significant causes of blindness in developed countries. We recognize the potential value of being able to repair the retina with replacement photoreceptor cells derived from pluripotent stem cell sources such as hESCs. We believe those therapies can provide the basis for new approaches for treating a wide variety of retinal degenerations in diseases where photoreceptors malfunction and/or die, either alone or in combination with our RPE therapy.

We have developed a human photoreceptor progenitor cell. We believe that our photoreceptor progenitor cells are unique with respect to both the markers they express as well as their plasticity, meaning that they can differentiate into both rods and cones, and therefore provide a viable source of new photoreceptors for retinal repair. In addition, our photoreceptor progenitors appear to secrete neuroprotective factors, and have the ability to phagocytose (digest) such materials as the drusen deposits that build up in the eyes of dry AMD patients, and so may provide additional benefits beyond forming new photoreceptors when injected into the subretinal space in the eyes of patients. We will continue our preclinical investigation in animal models, establish appropriate correlation between integration of the transplanted cells and visual function in the animals, and then consider preparation of an IND and/or IMPD application to commence clinical studies with these cells. As part of our evaluation of this program, we will consider, among other things, the data generated from pre-clinical studies, our understanding of the potential market opportunity, and our ability to allocate capital resources to adequately fund the program to the next milestone.

Retinal Ganglion Cell Progenitor Program

In the United States alone, approximately 100,000 people are legally blind from glaucoma. The only proven treatment is drug therapy or surgically lowering the intraocular pressure, but many patients lose vision despite receiving these treatments. In glaucoma, retinal ganglion cells degenerate before photoreceptors are lost. We are currently conducting pre-clinical research and development activities regarding differentiation of stem cells into retinal ganglion cells and demonstration of the ability of those cells to protect against elevated intraocular pressure in glaucoma models. We have succeeded in generating a unique human ganglion progenitor cell which, when injected in animal models of glaucoma, appear to protect against damage and to form new ganglion nerve cells. We will continue our preclinical investigation in animal models, establish appropriate correlation between integration and visual function in the animals, and then consider preparation of an IND and/or IMPD application to commence clinical studies with these cells. As part of our evaluation of this program, we will consider, among other things, the data generated from pre-clinical studies, our understanding of the potential market opportunity, and our ability to allocate capital resources to adequately fund the program to the next milestone.

Corneal Endothelial Program

Diseases and injuries affecting the cornea are another major cause of blindness worldwide. Although the cornea is clear and seems to lack substance, it is actually a highly organized group of cells and proteins. To see well, all layers of the cornea must be free of any cloudy or opaque areas. In instances where the cornea is damaged or scarred, such as due to chemical injury or infection, or thinning as a consequence of aging or an inherited disorder, the current standard of care is a cornea transplant, also referred to as a keratoplasty or corneal graft. The graft replaces damaged corneal tissue with healthy corneal tissue donated from an eye bank. In the past, full thickness corneal transplants were used as part of the procedure. However, a newer version of corneal transplant, known as Descemet's Stripping Endothelial Keratoplasty, or DSEK, is gaining prominence as the surgical method. DSEK utilizes the innermost layers, i.e., the endothelial layer and Descemet membrane, for transplant. While corneal transplants are performed routinely (more than 40,000 corneal transplants are performed in the U.S. each year), there is still a pressing need for transplantable corneal tissue. The cadaveric source of donor eyes in the eye banks in the U.S. is not sufficient for the number of

patients in need of the surgery, and the corneal tissue being used is often from older donors and hence not as dense or robust as might be desired. We believe that corneal blindness is a significant unmet medical need.

We have been able to generate sheets of corneal endothelial cells, with Descemet membrane, from hESCs. These endothelial sheets, which resemble fetal cornea in cell density, and thickness and durability of the tissue graft, could serve as the transplanted tissue in DSEK. In culture, our corneal endothelial cells have all the hallmarks, both marker expression and morphology, of native human corneal endothelium. We are testing these cells in several animal models of corneal diseases. We will continue our pre-clinical investigation in animal models, with the goal of establishing that the transplanted tissue functions correctly in the animals, and then consider preparation of an IND and/or IMPD application to commence clinical studies with these cells. As part of our evaluation of this program, we will consider, among other things, the data generated from pre-clinical studies, our understanding of the potential market opportunity, and our ability to allocate capital resources to adequately fund the program to the next milestone.

Other Programs

In addition to our ophthalmology programs we are investing resources into our other programs where we feel that we can leverage our expertise in cellular and developmental biology to generate allogeneic therapies that have the potential to improve health care in other prevalent degenerative diseases and diseases of aging. At the core of our pipeline planning are approaches intended to address large unmet medical needs with allogeneic stem cell-derived therapeutics. The criteria for prioritizing these programs include stem cell capability, competitive landscape within the therapeutic area and severity/prevalence of the therapeutic area. We also utilize a proof-of-concept, or POC, approach in our product development process, testing our candidate therapies in relevant animal models of human disease in order to assess the likelihood of success when it comes time to try those therapies in human patients. Our POC approach allows us to focus only on the most promising projects by verifying the science behind many ideas early in the development process while terminating those programs with a low probability of success.

Mesenchymal Stem Cells

Pluripotent stem-cell derived mesenchymal stem cells, or MSCs is the most active, of our “other programs”. MSCs regulate immune and inflammatory responses, providing therapeutic potential for treating diseases characterized by the presence of an inflammatory component, which makes them an attractive tool for the cellular treatment of autoimmunity and inflammation. Their underlying molecular mechanisms of action together with their clinical benefit — for example, in autoimmunity — are, in our opinion, being revealed by an increasing number of clinical trials and preclinical studies of MSCs. The immunosuppressive/immunomodulatory activity of these cells allows MSCs to be transplanted nearly universally, i.e., as an allogeneic cell therapy, without matching between donors and recipients. MSCs’ universality, along with the ability to manufacture and store these cells long-term, present a unique opportunity to produce an "off-the-shelf" cellular drug ready for treatment of diseases in both acute and chronic settings.

The current source of MSCs for therapeutic applications are isolated from cord blood and adult sources such as bone marrow and adipose (fat) tissue. However, once isolated from the source, the MSCs present in these sources do not propagate well in cell culture. Rather, the cells undergo replicative senescence, or “aging,” within only a few passages (i.e., after a limited number of population doublings of cells through cell division). Accordingly, the number of doses of MSCs that can be generated from each donor is limited, and the process using adult MSC sources is consequently high-touch, and therefore riskier.

We believe we have succeeded at creating a differentiated MSC product by producing the cells in culture from a pluripotent stem cell source. Our cell culture process permits us to manufacture large scale quantities of MSC from a renewable stem cell source, potentially eliminating the sourcing issues attendant with relying on adult sources of these cells. The stem-cell-sourced manufacturing process is scalable for global commercialization of MSC therapies, and should prove to be less costly (particularly at commercial scale) when compared to the adult-sourced, and cord blood-sourced, MSC products in development by other companies.

In our preliminary testing of our stem cell-derived MSCs in animal models of autoimmune disease, we have noted another differentiating feature of our cells, relative to other MSCs. The MSCs generated using our proprietary manufacturing approach seem to be more potent with respect to suppressing autoimmune responses in certain diseases models when compared to the equivalent dose of bone marrow MSCs. This potency was dependent on the number of passages in culture our MSCs had been through, with the earlier passage MSCs retaining the greatest potency. This correlates with reports in the scientific literature which suggest that adult MSCs lose potency as they are propagated in culture, and reports indicating that MSC from young adult donors are more potent than MSC from elderly donors. Being derived from embryonic stem cells, the early-passage MSCs we are testing for potential therapeutic uses seem to represent the earliest and most potent stage of biological development for MSCs, a stage that cannot be obtained from adult sources.

We have initiated a number of pre-clinical studies designed to assess the therapeutic value of our MSC's in a number of disease indications, including: lupus, uveitis, sepsis, osteoarthritis and multiple sclerosis, among others. Some of our studies are being carried out in small animal models of disease, such as genetic or induced models. Others are being carried out on larger animals under an approved Investigational New Animal Drug, or INAD, application in place with the U.S. FDA.

Our goal is to conduct preclinical proof-of-concept studies in relevant veterinarian patients and laboratory animal models of disease, and based on those results, advance certain of these MSC discovery programs into IND-enabling pre-clinical studies and perhaps file IND applications, as circumstances dictate. We will evaluate opportunities for strategic partnering relationships, out-licensing or other commercial transactions with large pharmaceutical and biotech companies at various stages in these preclinical programs with an eye towards mitigating our overall cost of these programs.

Neuroprotective Biologics

In the course of our work with various progenitor cells for treating ocular degenerative diseases, we have discovered that certain progenitor cells not only have the ability to participate directly in the formation of new tissue in the eye, but also were able to exert a neuroprotective effect that reduces the rate of degeneration of native photoreceptors in the animals' eyes, for example, in animal models of macular degeneration. These cells appeared to also be a source of neuroprotective paracrine factors; biological agents which may themselves be useful as drugs. Further, we observed that these protective effects were uniquely produced by particular progenitor cell sub-types. The restriction of this protective activity to only a certain progenitor cell type permits us to examine which factors are differentially produced by these cells as compared with other closely related progenitor cells which do not seem to secrete any protective agents. We anticipate that the neuroprotective agent(s) that we may ultimately develop as drug candidates may be useful not only in retinal diseases and dystrophies, but may have broader applications in central nervous system and peripheral nervous system diseases and disorders, including diseases causing cognitive function impairment, movement disorders such as Parkinson's Disease, and ischemic events such as caused by stroke.

Platelets

Platelets are key elements in maintaining blood vessel integrity, or hemostasis, and are therefore central to wound healing and tissue regeneration after injury or surgery. Platelets are a mainstay in treating trauma, and are increasingly being used to promote healing from a wide range of surgeries. When platelet levels decrease and result in thrombocytopenia, such as when bone marrow is destroyed or suppressed, the decrease in platelet function is often a leading cause of morbidity.

Platelets are the most difficult blood product to maintain. They cannot be frozen or refrigerated. Instead, they must be stored at room temperature which limits the shelf life of platelets to five to seven days both because of loss of activity and risk of bacterial contamination during storage. It is our belief that the practical use of platelets is limited by availability. Our estimates are that, but for limitations on donated platelet supplies, there would be a demand for a substantial number of additional units of platelets each year beyond the current platelet usage, particularly for expanded use in surgical settings such as joint replacement or to prevent scarring.

We have developed a manufacturing process for generating megakaryocytes, proplatelet forming cells and ultimately platelets using either hESCs or iPSCs as the starting materials. This process can be carried out under GMP conditions, and we are approaching the ability to produce clinical doses of platelets. We have also solved an important problem in this process, in that we have developed a feeder-free process for making platelets from start to finish. This means our process may be portable into a continuous flow bioreactor setting.

Overall, we observe that the platelets made by our stem cell process have ultrastructural and morphological features that are indistinguishable from normal blood platelets. We believe our platelets function appropriately as well, both *in vitro* and *in vivo*. They respond to thrombin stimulation, form microaggregates, and facilitate clot formation and retraction. In animal models of injury, our stem cell derived platelets contribute to developing thrombi at sites of vascular injury.

While the early data that we have generated are encouraging, we believe that our limited resources are best allocated to our other programs, at this time. In the future we may look to partner this program, pursue government funding or permanently cancel the program.

Our Intellectual Property

Our research and development is supported by a robust intellectual property portfolio, including pending and issued patent filings and certain technologies which we maintain as trade secrets. As of March 27, 2014, we had 46 issued patents and 178 pending patent applications filed worldwide, a substantial portion of which pertain to our active product development programs. Any patents that may issue from our pending patent applications and which are directed to our current clinical and preclinical therapeutic programs would expire between 2024 and 2035, excluding any patent term extension. These patents and patent applications disclose compositions of matter, pharmaceutical compositions, methods of use and manufacturing methods. For instance, we already have issued patents with broad reaching claims in the U.S. and other major markets around our RPE clinical programs, and continue to actively improve our existing portfolio with filings around the improvements we make as we have translated the use of RPE cells from the bench to a regulated manufacturing and human therapy program. To illustrate, over the past few years, the United States Patent and Trademark office, and other patent offices in major market countries, have granted several of our patents covering the methods we use to derive and produce our RPE cell therapy, as well as patents that cover the use of the RPE cells for formulating pharmaceutical preparations for use in human patients and for treating various macular degenerative diseases such as dry AMD and SMD.

With respect to our therapeutic programs generally, we have filed a number of patents, including broad omnibus patent applications, intended to cover the generation of transplantable cells and tissues from any pluripotent stem cell source including hESC, iPSC and other pluripotent stem cell sources as may be identified. Our patent strategy has been to protect the method of manufacturing these transplantable cells and tissues, as well as pharmaceutical preparations of the cells/tissues and the use of those pharmaceutical preparations in patient treatment settings. Our patent strategy includes very broad claims, as well as claims more narrowly directed to our actual processes and formulations. In the case of our RPE Program, to illustrate, we have pursued layers of various independent and dependent claims that range from very broad methods and formulations, to narrower claims which further define and protect the methods and compositions we actually use; as for example, the particular steps in our derivation process, defining the resulting RPE cells by functional characteristics, the format of the RPE cells in the final formulation (cell suspension, sheet of cells, cells on a matrix support), etc. In the course of pursuing broad claims with the intention of covering not only our business but creating a barrier to entry to potential competitors who wish to use similar though not identical technology, we have focused on both literal claim scope as well as claims intended to provide additional coverage under the doctrine of equivalents. The doctrine of equivalents is a legal rule in most of the world's patent systems that allows a court to hold a party liable for patent infringement even though the infringing formulation or process does not fall within the literal scope of a patent claim, but nevertheless is equivalent to the claimed invention.

Our success will likely depend upon our ability to preserve our proprietary technologies as well as operate without infringing the proprietary rights of other parties. However, we may also need to rely on certain proprietary technologies and know-how that are not patentable. With regard to our own proprietary information, we seek to protect such information, in part, by the use of confidentiality agreements with our employees, consultants and certain of our contractors.

We maintain a disciplined patent policy and, when appropriate, seek patent protection for inventions in our core technologies and in ancillary technologies that support our core technologies, or which we otherwise believe will provide us with a competitive advantage. We pursue this strategy by filing patent applications for discoveries we make, either alone or in collaboration with scientific collaborators and strategic partners. Typically, although not always, we file patent applications both in the United States and in select international markets. In addition, we sometimes obtain licenses or options, if available, to acquire licenses to patent filings from other individuals and organizations that we anticipate could be useful in advancing our research, development and commercialization initiatives and our strategic business interests.

Our patents do have a finite life with respect to enforcement against third parties and will eventually expire. The fundamental consequence of patent expiration is that the invention covered by that patent will enter the public domain. However, the expiration of patent protection, or anticipated patent protection, for the bulk of our portfolio is not scheduled to begin for approximately ten to fifteen years. In some instances, we believe that patent term extensions and adjustments, or other forms of exclusivity dependent on our patent rights, may be available in particular instances, such as by operation of patent and/or regulatory laws and regulations. Due to the rapid pace of technology development in this field, and the volume of intellectual property we anticipate will be generated over the next decade, it is unlikely that the expiration of any existing patents or patent rights would have an adverse effect on our business. As we make improvements to formulations and dosage amounts, find new combinations of cells and combinations of cells and other therapeutics, refine manufacturing, and elucidate new indications for which our therapies can be used, we expect that we will continue to file additional patent applications covering these new inventions in the future. Any actual products that we develop are expected to be supported by intellectual property covered by granted patents or current patent applications that, if granted, would not expire for 20 years from the date first filed. For example, the granted United States patents covering our RPE cell therapy product do not begin to expire until 2025 at the earliest, and then only if no patent term extensions are provided. As we have made improvements to our RPE program, particularly arising from the translation of the cell therapy into a human patient treatment setting, we have diligently filed on those improvements. These additional patent filings may prove to be significant barriers to entry for third parties wishing to compete, and would extend the patent portfolio well into the 2030’s. Due to the early stage of our business, we differ from, for example, the pharmaceutical industry where the loss of a key significant patent can result in contemporaneous loss of products, programs or revenues. Our business is at the front end of the patent protection spectrum and is not expected to be significantly impacted in the near term by expiration of existing patents or patents issued in response to existing applications.

Research and License Agreements

Collaborative Agreements

On June 21, 2011, we entered into a definitive collaborative agreement with Roslin Cells LTD, or Roslin Cells, of Scotland. We will work together to establish a bank of GMP-grade hESC lines using our patented, proprietary "single-cell blastomere" technique for deriving hESC lines without destroying embryos. Stem cell lines from the resulting bank will be made available for both research and commercial purposes. Our agreement with Roslin Cells is intended to address a number of practical and ethical issues facing the field, and should make it easier for researchers to explore the enormous potential of this exciting science for the future benefit of patients.

Under the terms of the agreement, the hESC lines will be created and banked in compliance with the regulations of both the U.S. FDA and the European Medicines Agency. Roslin Cells will be responsible for maintaining the banked hESC lines, and it is anticipated that the banked hESC lines can be ushered expeditiously from laboratory settings directly into clinical programs, thereby speeding translational research. Roslin Cells will promote access to the hESC lines to both academic and commercial entities, and will establish a straightforward license which should enable third parties to have a predictable path to commercialization, at the time they choose to use the cells for discovery and preclinical research. We will continue to control any licenses to commercialization of products for the eye. Under the terms of the non-exclusive license relating to cell bank distribution, we will pay the first $200,000 in revenue that we receive from the cell bank, and 20% of any such revenue thereafter.

Licenses of Intellectual Property to Us

The following summarizes technology licensed to us and being used in our preclinical research and development efforts towards developing non-ocular therapies, such as our MSC program. None of our technology that we rely on in our current clinical RPE programs use any licensed technology.

Stem Cell & Regenerative Medicine International

On July 21, 2011, as described in greater detail below, we entered into an agreement with Stem Cell & Regenerative Medicine International, or SCRMI, and CHA Bio & Diostech Co, Ltd., or CHA Biotech, under which SCRMI exclusively licensed to us the rights to SCRMI's hemangioblast program for North America (United States and Canada). This license was part of a restructuring of SCRMI, a joint venture formed between us and CHA Biotech.

StemLifeLine, Inc.

On May 4, 2012, we entered into an exclusive license agreement with StemLifeLine, Inc. in which we obtained exclusive rights, with the right to sublicense, for commercial use of certain human stem cell lines that were created by StemLifeLine using our single blastomere technology, i.e., without destruction of any embryos. These lines were intended to be used in our manufacture of cell therapy products. We paid a single one-time fee of $65,000 to StemLifeLine for the exclusive license, and will not owe any further fees or royalties under the exclusive license. In addition to the exclusive license, we also obtained a non-exclusive license to distribute other human embryonic stem cell lines made by StemLifeLine, Inc. through stem cell banks, such as in collaboration with Roslin Cells. Under the terms of the non-exclusive license relating to cell bank distribution, we will pay the first $200,000 in revenue that we receives from the cell bank, and 20% of any such revenue thereafter.

Exclusive Licenses of Intellectual Property from Us

The following summarizes licenses from us to third parties.

International Stem Cell Corporation

On May 14, 2004, we entered into three license agreements (indefinite license periods) with International Stem Cell Corporation, or ISCO, formerly known as PacGen Cellco, LLC; these licenses were subsequently amended in August 2005 and then amended and restated in February 2013. Pursuant to the 2013 Amended and Restated License Agreements, we licensed to ISCO, on an exclusive basis, patent rights which cover the generation of stem cells by either somatic cell nuclear transfer, or SCNT, or parthenogenesis. The rights under the SCNT patents were granted for the manufacture and sale of human cells for cell therapy in the treatment of human diabetes and liver diseases. The grant under the parthenogenesis patent rights provides ISCO with a license under those patents only for manufacture and sale of human cells for cell therapy in the treatment of all human therapies. As part of the Amended and Restated Agreements, ISCO gave up rights under a non-exclusive license to certain future-developed technologies granted under earlier versions of the agreements, including giving up all rights under our patent filings directed to our RPE program and related technology.

Stem Cell & Regenerative Medicine International

On December 1, 2008, we formed an international joint venture with CHA Biotech. The new company, SCRMI, will develop human blood cells and other clinical therapies based on our hemangioblast program, one of our core technologies. Under the terms of this agreement, we upfront a 33% interest in the joint venture, and will receive another 7% interest upon fulfilling certain obligations under the agreement over a period of 3 years. Our contribution includes (a) the uninterrupted use of a portion of our leased facility at our expense, (b) the uninterrupted use of certain equipment in the leased facility, and (c) the release of certain of our research and science personnel to be employed by the joint venture. In return, for a 60% interest, CHA Biotech has agreed to contribute $150,000 cash and to fund all operational costs in order to conduct the hemangioblast program. Effective May 1, 2010, we were no longer obligated to provide laboratory space to SCRMI. As of September 30, 2013, we hold a 40% interest in the joint venture and CHA Biotech owns a 60% interest. We are in negotiations with on further funding of the joint venture, but there can be no assurances that an agreement will be reached. Any financial statement impact at this time is unclear should an agreement not be reached.

We have agreed to collaborate with SCRMI in securing grants to further research and development of its technology. Additionally, SCRMI has agreed to pay us a fee of $500,000 for an exclusive, worldwide license to the hemangioblast program. We recorded $29,412 and $29,412 in license fee revenue for the years ended December 31, 2013 and 2012, respectively, in the consolidated statements of operations, and the balance of unamortized license fee of $351,715 and $381,127 is included in deferred revenue in the consolidated balance sheets at December 31, 2013 and December 31, 2012, respectively.

In July 2011, we entered into a binding term sheet with CHA Biotech, with the expectation of entering into a future definitive agreement, in which SCRMI was realigned around both product development rights and research responsibilities. Under the terms of the binding term sheet, SCRMI exclusively licensed the rights to its hemangioblast program to us for United States and Canada and expanded the jurisdictional scope of the license to CHA Biotech to include Japan (in addition to South Korea, which was already exclusively licensed to CHA Biotech). As part of the agreement, the scientists at SCRMI involved in the hemangioblast program were transferred to us, and SCRMI discontinued its research activity and became solely a licensing entity. In order to maintain our exclusive license, we are obligated to satisfy certain diligence requirements relating to licensed products, defined in the license agreement as “any therapeutic, diagnostic, bioinformatics or other human or veterinarian health care product and/or service and or research reagent utilizing or derived in any manner whatsoever from the Technology”. Intellectual property rights created by us in the course of our research are subject to a non-exclusive license to CHA Biotech for Japan and South Korea, and to SCRMI to be sub-licensable under certain circumstances for countries other than the United States, Canada, Japan and South Korea. By filing the investigational new animal drug application on September 12, 2013, with the U.S. FDA, we met the commitment required to maintain its exclusive license.

CHA Biotech

On March 31, 2009, we entered into a licensing agreement under which we have licensed our RPE technology, for the treatment of diseases of the eye, to CHA Biotech for development and commercialization exclusively in Korea. We are eligible to receive up to $1.9 million in fees based upon achieving certain milestones, including us making an IND submission to the U.S. FDA to commence clinical trials in humans using the technology, which we completed during the second half of 2009. We received an up-front fee of $250,000 and additional consideration under the agreement in the amount of $850,000. Under the terms of the agreement, CHA Biotech will incur all of the cost associated with RPE clinical trials in Korea.

On May 21, 2009, we entered into a licensing agreement under which we licensed our proprietary single blastomere technology, which has the potential to generate stable cell lines, including RPE cells for the treatment of diseases of the eye, to CHA Biotech for development and commercialization exclusively in Korea. We received a $300,000 up-front license fee, and received an additional $300,000 in December 2009.

Embryome Sciences, Inc.

In 2008, we entered into three license agreements whereby we licensed to Embryome Sciences certain cell processing technologies, including technology licensed from Kirin Beer. We received up-front payments of $470,000 and will receive royalties from future sales, if any, of product that utilizes the technologies from the licenses.

Nonexclusive Licenses of Intellectual Property by Us

We have entered into numerous nonexclusive license agreements pursuant to which we have granted non-exclusive rights to various parties to use certain patent rights in defined fields. These licenses generally provide for commercialization of our intellectual property and typically contain minimum royalties, milestones and continuing royalties based upon percentages of revenue.

Regulations

Our research and development activities and the future manufacturing and marketing of our potential therapeutic products are, and will continue to be, subject to regulation for safety and efficacy by numerous governmental authorities in the United States and other countries.

In the United States, pharmaceuticals, biologicals and medical devices are subject to rigorous regulation by the FDA. The Federal Food, Drug and Cosmetic Act, the Public Health Service Act, applicable FDA regulations, and other federal and state statutes and regulations govern, among other things, the testing, manufacture, labeling, storage, export, record keeping, approval, marketing, advertising, and promotion of our potential products. Product development and approval within this regulatory framework takes a number of years and involves significant uncertainty combined with the expenditure of substantial resources.

The steps required before our potential therapeutic products may be marketed in the United States include: preclinical laboratory and animal tests; submission and acceptance of an IND application; safe and efficacious human clinical trials; submission of a Biologics Licensing Application; and Regulatory Approval.

The testing and approval process will require substantial time, effort and expense. The time for approval is affected by a number of factors, including relative risks and benefits demonstrated in clinical trials, the availability of alternative treatments and the severity of the disease. Additional animal studies or clinical trials may be requested during the FDA review period, which might add to that time. FDA approval of the application(s) is required prior to any commercial sale or shipment of the therapeutic product. Biologic product manufacturing facilities located in certain states also may be subject to separate regulatory and licensing requirements.

In addition, the FDA may require post-marketing studies. After receiving FDA marketing approval for a product for an initial indication, further clinical trials may be required to gain approval for the use of the product for additional indications. The FDA may also require post-marketing testing and surveillance to monitor for adverse effects, which could involve significant expense, or the FDA may elect to grant only conditional approvals subject to collection of post-marketing data.

Among the conditions for product licensure is the requirement that the prospective manufacturer’s quality control and manufacturing procedures conform to the FDA’s current good manufacturing practice (GMP) requirements. Even after a product’s licensure approval, its manufacturer must comply with GMP on a continuing basis, and what constitutes GMP may change as the state of the art of manufacturing changes. Domestic manufacturing facilities are subject to regular FDA inspections for GMP compliance, which are normally held at least every two years. Foreign manufacturing facilities are subject to periodic FDA inspections or inspections by the foreign regulatory authorities.

Domestic manufacturing facilities may also be subject to inspection by foreign authorities.

In addition to safety regulations enforced by the FDA, we are also subject to regulations under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act and other present and potential future and federal, state, local, and foreign regulations.

Outside the United States, we will be subject to regulations that govern the import of drug products from the United States or other manufacturing sites and foreign regulatory requirements governing human clinical trials and marketing approval for our products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursements vary widely from country to country.

The United States Congress, several states and foreign countries have considered legislation banning or restricting human application of ES cell-based and nuclear transfer based technologies. No assurance can be given regarding future restrictions or prohibitions that might affect our technology and business. In addition, we cannot assure you that future judicial rulings with respect to nuclear transfer technology or human ES cells will not have the effect of delaying, limiting or preventing the use of nuclear transfer technology or ES cell-based technology or delaying, limiting or preventing the sale, manufacture or use of products or services derived from nuclear transfer technology or ES cell-derived material. Any such legislative or judicial development would harm our ability to generate revenues and operate profitably.

For additional information about governmental regulations that will affect our planned and intended business operations, see “RISK FACTORS” beginning below.

Competition

We are engaged in activities in the biotechnology field, which is characterized by extensive research efforts and rapid technological progress. If we fail to anticipate or respond adequately to technological developments, our ability to operate profitably could suffer. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis, products that are more effective or less costly than any product candidate that we may develop, or achieve earlier patent protection, regulatory approval, product commercialization and market penetration than us. Additionally, technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing our product candidates against competitors. We cannot assure you that research and discoveries by other biotechnology, agricultural, pharmaceutical or other companies will not render our technologies or potential products or services uneconomical or result in products superior to those we develop or that any technologies, products or services we develop will be preferred to any existing or newly-developed technologies, products or services.

We are aware that several companies and non-profit entities are working on various RPE formulations for treating macular degeneration. For example, Pfizer, Regenerative Patch Technologies and the Riken Center for Developmental Biology (Japan) have publicly stated that each is working towards clinical trials of RPE patches (sheets of cells) for treating wet AMD, and have also stated that they believe their formulations of RPE cells could potentially be used for treating dry AMD. Cell Cure Neurosciences Ltd. (Israel) has previously announced that it is developing RPE cell formulations for dry AMD.

Other cell types are also being developed for subretinal use in treating various forms of macular degeneration. StemCells Inc. recently commenced treating dry AMD patients with purified human neural stem cells. Bioheart, Inc. sponsors an active clinical trial for treating dry AMD with adipose stem cell (ASC), while the University of California Davis and Retinal Associates of South Florida are the sponsors of FDA approved pilot studies to determine whether it would be safe and feasible to inject CD34+ stem cells from bone marrow into the eye as treatment for patients who are irreversibly blind from various retinal conditions including dry AMD. Neurotech, Inc. recently completed a phase I study testing the safety of injecting encapsulated cells that express CNTF in dry AMD patients, while Janssen Research & Development, LLC suspended its safety study of umbilical cord stem cells administered subretinally in dry AMD patients.

Research and Development Expenditures

We spent the following amounts on company-sponsored research and development activities during each of the last three fiscal years:

Fiscal Year	Research and Development Expenditures (As restated)
2013	$11,564,768
2012	$14,158,936
2011	$9,753,759

Employees

As of March 17, 2014, we had 38 full-time employees, of whom 13 hold Ph.D. or M.D. degrees. Twenty-nine employees are directly involved in research and development activities and 9 are engaged in business development and administration. We also use the services of numerous outside consultants in business and scientific matters. We believe that we have good relations with our employees and consultants.

Item 1A. Risk Factors.

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below, including information in the section of this document entitled “Forward Looking Statements.” The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial may also impair our business operations. If any of the following risks actually occur, our business, financial condition or results of operations could be materially adversely affected, the value of our common stock could decline, and you may lose all or part of your investment.

Risks Related to our Early Stage of Development and Capital Resources

We have a history of operating losses and we may not achieve future revenues or operating profits.

We have generated modest revenue to date from our operations. Historically we have had net operating losses each year since our inception. As of December 31, 2013, we have an accumulated deficit of $313,844,357 and a stockholders' deficit of $22,533,610. We incurred net losses of $31,022,248, $34,584,115, and $55,192,803 for the years ended December 31, 2013, 2012, and 2011, respectively. We have limited current potential sources of income from licensing fees and we do not generate significant revenue from any other source. Additionally, even if we are able to commercialize our technologies or any products or services related to our technologies if approved, it is not certain that they will result in revenue or profitability.

Our business is at an early stage of development and we may not develop therapeutic products that can be commercialized.

Our most advanced product candidates are in Phase I/II clinical trials and we don't have any products that are currently in the marketplace. Our potential therapeutic products will require extensive preclinical and clinical testing prior to regulatory approval in the United States and other countries and may additionally require post-authorization outcome studies. We may not be able to obtain regulatory approvals in some cases, or commence or continue clinical trials for some of our products, or commercialize any products. Any of our therapeutic and product candidates may prove to have undesirable and unintended side effects or other characteristics that could cause adverse effects on patient safety, efficacy or cost-effectiveness that could prevent or limit their therapeutic use, commercialization or acceptance in the medical community. Any product using any of our technologies may fail to provide the intended therapeutic benefits, or even achieve therapeutic benefits equal to or better than the standard of treatment at the time of testing or production, or may not be safe for use in humans. In addition, we will need to determine whether any of our potential products can be manufactured in commercial quantities or at an acceptable cost, with or without third-party support. Our efforts may not result in a product that can be or will be marketed successfully. Physicians may not prescribe our products, and patients or third party payors may not accept or reimburse for use of our products. For these reasons we may not be able to generate product revenues.

We have never generated any revenue from product sales and may never be profitable.

We have limited clinical testing, regulatory, manufacturing, marketing, distribution and sales experience capabilities which may limit our ability to generate revenues. Due to the early stage of our therapeutic products, including regenerative medical therapies and stem cell therapy-based programs, we have not yet invested significantly in marketing, distribution or product sales resources. We cannot assure you that we will be able to develop any of these

resources successfully or as expediently as necessary, either alone or with strategic partners. We do not anticipate generating revenues from product sales for several years or more, if ever. Our ability to generate future revenues from product sales will depend on, among other things, our success in:

- commencing, continuing and completing research and preclinical and clinical development of our therapeutic candidates;
- seeking and obtaining regulatory and marketing approvals for therapeutic candidates, and the manufacturing process for generating those candidates for which we complete clinical studies;
- developing a scalable, reproducible, globally scalable and fully GMP compliant manufacturing process for our therapeutic candidates;
- establishing and maintaining supply and manufacturing relationships with third parties that can satisfy our needs for products and services that meet our required specifications to support clinical development and the market demand for our therapeutic candidates, if approved;
- launching and commercializing therapeutic candidates for which we obtain regulatory and marketing approval, either by collaborating with a partner or, if launched independently, by establishing a marketing, sales and distribution infrastructure;
- obtaining market acceptance of our therapeutic candidates as a viable treatment of the targeted conditions in question;

- adequately addressing any competing technological and market developments;
- implementing additional internal systems and infrastructure, as needed;
- identifying and validating new therapeutic candidates;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- attracting, hiring and retaining qualified personnel.

Even if one or more of the therapeutic candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate, including costs related to additional clinical studies, and such costs may exceed our estimates. Even if we are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations. The inability to do so will inhibit or harm our ability to generate revenues or operate profitably.

We have determined that material weaknesses exist in our system of internal control over financial reporting, which could have a material impact on our business.

Our ability to implement our business plan and comply with regulations requires an effective planning and management process. We expect that we will need to improve existing operational and financial systems, procedures and controls, and implement new ones, to manage our future business effectively. Any implementation delays, or disruption in the transition to new or enhanced systems, procedures or controls, could harm our ability to forecast sales, manage our supply chain, and record and report financial and management information on a timely and accurate basis.

Furthermore we are required to maintain internal control over financial reporting adequate to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our consolidated financial statements in accordance with generally accepted accounting principles. In connection with the restatement of certain of our financial statements for fiscal years December 31, 2009, 2010, 2011, and 2012, for each quarter in our fiscal years ended December 31, 2011 and December 31, 2012, and for the first three quarters of the fiscal year ended December 31, 2013, we determined that we have a material weakness as of December 31, 2013, namely that our controls over the evaluation and review of complex and non-routine transactions were not effective.

Due to these material weaknesses, we have concluded that as of December 31, 2013, our internal controls over financial reporting were not effective. Until these complex and non-routine control deficiencies are fully remediated, it may be more difficult for us to manage our business, our results of operations could be harmed, our ability to report results accurately and on time could be impaired, investors may lose faith in the reliability of our statements, and the price of our securities may be materially impacted. We cannot assure you whether, or when, the control deficiencies that are identified as material weaknesses will be fully remediated.

We do not expect that our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. Over time, controls may become inadequate because changes in conditions or deterioration in the degree of compliance with policies or procedures may occur. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. As a result, we cannot assure you that significant deficiencies or material weaknesses in our internal control over financial reporting will not be identified in the future. A material weakness means a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the registrant's annual or interim financial statements will not be prevented or detected on a timely basis.

Any failure to maintain or implement required new or improved controls, or any difficulties that we encounter in their implementation, could result in additional significant deficiencies or material weaknesses, cause us to fail to timely meet our periodic reporting obligations, or result in material misstatements in our consolidated financial statements. Any such failure could adversely affect the results of periodic management evaluations and annual auditor attestation reports regarding disclosure controls and the effectiveness of our internal control over financial reporting.

The restatement of our historical financial statements has already consumed a significant amount of our time and resources and may have a material adverse effect on our business and stock price.

As described earlier, we have restated certain of our financial statements. The restatement process was highly time and resource-intensive and involved substantial attention from management and significant legal and accounting costs. Although we have now completed the restatement, we cannot guarantee that we will have no inquiries from the SEC or other entities regarding our restated financial statements or matters relating thereto.

Any future inquiries from the SEC as a result of the restatement of our historical financial statements will, regardless of the outcome, likely consume a significant amount of our resources in addition to those resources already consumed in connection with the restatement itself.

Further, many companies that have been required to restate their historical financial statements have experienced a decline in stock price and stockholder lawsuits related thereto.

We currently have an Interim President while we search for a permanent Chief Executive Officer.

During the first quarter of 2014, we executed a separation by mutual release agreement with our Chief Executive Officer, pursuant to which our CEO’s employment ended effective immediately. As a result, the board of directors formed a CEO search committee and is currently conducting a search. While we expect to recruit a new CEO in the coming months, we cannot assure you that the process will be concluded in a timely fashion. The search for and transition to a permanent CEO could be disruptive to our business, growth, financial condition and profitability. We believe each member of our senior management team is important to our success and the unexpected loss of any of these persons could impair our day-to-day operations as well as our strategic direction.

Our primary source of liquidity is our financing arrangement with Lincoln Park, and changes in our share price directly affect our ability to fund our operations.

We currently rely on our share purchase arrangement with Lincoln Park Capital Fund, LLC, or Lincoln Park, to fund our ongoing operations. Pursuant to the Purchase Agreement with Lincoln Park, the purchase price of such common stock sold to Lincoln Park is based on the prevailing market price of our common stock immediately preceding the time of sales; we control the timing and amount of any future sales, if any, of common stock. There are no upper limits to the price Lincoln Park may pay to purchase our common stock. The purchase price in most cases is directly derived from the prevailing market price of our common stock on OTCBB. Though the purchase price cannot be less than $0.03, this arrangement means that our prevailing share price directly affects the number of shares we need to issue to Lincoln Park at any given time to fund short-term operations. The number of shares issuable under our Certificate of Incorporation and the number of shares to be registered for sale to Lincoln Park are both limited, and a share price that falls and stays too low would make it difficult or impossible to fund our operations through sales of shares to Lincoln Park due to these limitations.

As of March 20, 2014, we have access to approximately $6.6 million in capital under our arrangement with Lincoln Park.

We have a limited operating history on which investors may evaluate our operations and prospects for profitable operations.

If we continue to suffer losses as we have in the past, investors may not receive any return on their investment and may perhaps lose their entire investment. Our prospects must be considered speculative in light of the risks, expenses and difficulties frequently encountered by companies in their early stages of development, particularly in light of the uncertainties relating to the new, competitive and rapidly evolving markets in which we anticipate we will operate. A substantial risk is involved in investing in us because, as an early stage company, we have fewer resources than an established company, our management may be more likely to make mistakes at such an early stage, and we may be more vulnerable operationally and financially to any mistakes that may be made, as well as to external factors beyond our control. We also have no experience bringing therapeutics candidates through the regulatory approval process to commercialization, and we operate with little budgetary margin for error. To attempt to address these risks, we must, among other things, further develop our technologies, products and services, successfully implement our research, development, marketing and commercialization strategies, respond to competitive developments and attract, retain and motivate qualified personnel. Any failure to achieve any of the forgoing would result in an inability to achieve profitability.

We are subject to litigation that will be costly to defend or pursue and uncertain in its outcome.

Our business may bring us into conflict with our licensees, licensors or others with whom we have contractual or other business relationships, or with our competitors or others whose interests differ from ours. If we are unable to resolve those conflicts on terms that are satisfactory to all parties, we may become involved in litigation brought by or against us. That litigation is likely to be expensive and may require a significant amount of management's time and attention, at the expense of other aspects of our business. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business.

A significant adverse determination in any claim against us could adversely affect our operating results or financial condition. For example, as previously disclosed by us, we received a copy of the claim, or the Claim, by Gary D. Aronson's Creditor, or the Claimant, in the amount of $27,909,706, dated July 13, 2011, against the Estate of William Caldwell, who at the time of his death was our Chief Executive Officer and Chairman of the Board of Directors. The Claim states Mr. Caldwell's liability arises under a cause of action against us for violations of the Exchange Act, including Section 10(b) of the Exchange Act. In the Claim, the Claimant alleges that in September 2005, he entered into a Settlement Agreement with us pursuant to which he received a warrant to purchase shares of our common stock and that, among other thing, in reliance on misinformation provided to him by the Decedent he exercised his warrant to purchase the such common stock at an inflated price and received fewer shares than he was owed by us under the terms of his warrant. The Claim also alleges that we breached the terms of the warrant by not timely issuing stock after the warrant was exercised, and that we failed to provide proper notice of certain events that allegedly triggered the Claimant's purported rights to additional shares under the warrant. On August 23, 2011, Gary Aronson filed suit in federal court in Massachusetts against us and Wilmington Trust, N.A., as Special Administrator of the Estate of Decedent William Mackay Caldwell, which reasserts allegations made in the Claim. On August 25, 2011, John S. Gorton filed a substantially similar lawsuit. Aronson and Gorton then filed substantially similar First Amended Complaints. We together with Decedent moved to dismiss Aronson's and Gorton's First Amended Complaints. On July 16, 2012, a United States Magistrate Judge issued a report and recommendation concerning our and Decedent's motions to dismiss. The district court adopted the report and recommendation, dismissing all claims, including those asserting material misrepresentations in violation of the Exchange Act, except for one breach-of-contract claim against us concerning a warrant allegedly issued to William Woodward in breach of the warrants issued to Aronson and Gorton. Aronson and Gorton filed motions for leave to file Second Amended Complaints on October 23, 2012 and October 25, 2012. We did not oppose the motions. The Second Amended Complaints, deemed filed as of November 9 and 12, 2012, reasserted the claim for breach of contract with respect to the Woodward warrant, as well as new breach-of-contract claims against us related to a warrant allegedly issued to Deron Colby, an alleged extension of the exercise periods for stock warrants issued to Andwell, LLC and Nancy Burrows, and alleged stock sales in 2008. We moved to dismiss the second, third, and fourth counts of the Second Amended Complaints on November 30, 2012. A United States Magistrate Judge issued a report and recommendation concerning the motion to dismiss. The district court adopted the report and recommendation, denying the motions to dismiss as to the second and third counts of the Second Amended Complaints, and granting the motion to dismiss the fourth count with leave to amend. On September 25 and 26, 2013, Aronson and Gorton filed their Third Amended Complaints. On October 15, 2013, we answered Aronson's Third Amended Complaint and moved to dismiss Gorton's Third Amended Complaint for lack of subject-matter jurisdiction.

The amount we may be required to pay, in cash or in stock, in connection with any Claim may prove to exceed our estimated reserves and, in the case of payment in the form of stock, may prove to be highly dilutive to our stockholders. Should any judgment or settlement occur that exceeds our estimate, or a new claim arise, or if we become aware of additional information that requires us to adjust our estimation of potential exposure, we may need to adjust our overall reserve and, depending on the amount, such adjustment could be material and adversely affect our operating results or financial condition.

Form 4 filing delays by our former Chief Executive Officer have given rise to an investigation by the Securities and Exchange Commission into the delays and our Section 16 compliance procedures, and this investigation may result in penalties and/or sanctions against us.

As previously disclosed by us, in April 2013, it was determined that Gary Rabin, our then-Chief Executive Officer, failed to report 27 transactions in which Mr. Rabin sold shares of our common stock that took place between February 7, 2011 and January 10, 2013. Mr. Rabin filed a Form 4 under Section 16 of the Exchange Act on April 15, 2013 reporting the previously unreported sale transactions and correcting the total number of shares of our common stock that Mr. Rabin owned as of the date of filing of the Form 4. Our board of directors initiated an investigation into this matter upon becoming aware of it. We were advised by the SEC that it was investigating this matter, and we received and responded to requests for additional information from the SEC relating to such transactions and our procedures regarding Section 16 filings. We cooperated with the SEC's investigation and supplied information to the SEC in response to its information requests. We have discussed a reasonable resolution of the matter with the SEC on behalf of us, and we believe this matter is nearly resolved, although there can be no assurance that the matter will be resolved until such time as a resolution is completed. The Company has recorded an accrual of $375,000 as of December 31, 2013, related to the investigation. We entered a separation agreement with Mr. Rabin, as previously disclosed in our Current Report on Form 8-K filed on January 22, 2014. In connection with this investigation, Mr. Rabin received a Wells notice from the SEC in January 2014, which indicates that the SEC may bring a civil action against Mr. Rabin, and gave Mr. Rabin an opportunity to provide the SEC with information as to why such action should not be brought. Any action by the SEC could require us to expend significant financial and managerial resources and could also result in further volatility in the market price of our common shares. Nothing set forth in the foregoing statement constitutes an express or implied admission by us of any liability under the Securities Act, the Exchange Act or otherwise.

We will need to expand our organization and we may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2013, we had 38 full-time employees. As we mature and undertake the activities required to further develop and commercialize our therapeutic candidates, we may expand our full-time employee base and hire more consultants and contractors. Our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

We will require substantial additional resources to fund our operations and to develop our product candidates. If we cannot find additional capital resources, we will have difficulty in operating as a going concern and growing our business.

We currently operate with limited resources. On December 31, 2013, we had a cash balance of approximately $1.7 million, and approximately $14.2 million in capital remained available under our arrangement with Lincoln Park. Based upon current business activities, existing cash resources and our ability to sell shares to Lincoln Park, we forecast having sufficient cash and access to capital to enable us to operate through the first half of 2014. We could make these capital resources last longer, though, that would require the implementation of significant cost-cutting measures. These measures may include reducing our staff and cancelling development programs. Our future capital requirements will depend on many factors, including the:

- progress and costs of pre-clinical development and laboratory testing and clinical trials;
- time and costs involved in obtaining regulatory approvals;
- number of product candidates we pursue;
- costs involved in filing and prosecuting patent applications and enforcing or defending patent claims; and
- the costs associated with commercializing our product candidates if they receive regulatory approval, including the cost and timing of developing sales and marketing capabilities, or entering into strategic collaboration with others relating to the commercialization of our product candidates.

Other than our arrangement with Lincoln Park, we have no sources of debt or equity capital committed for funding. We can provide no assurance that we will be successful in any funding effort. The timing and degree of any future capital requirements will depend on many factors, including:

- our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- the accuracy of the assumptions underlying our estimates for capital needs in 2013 and beyond as well as for the clinical studies of our therapy candidates;
- scientific progress in our research and development programs;
- the magnitude and scope of our research and development programs;
- our progress with preclinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of therapeutic candidates that we pursue.

Our ability to execute our business strategy and sustain our infrastructure at our currently planned levels will be impacted by whether or not we have sufficient funds. Depending on market conditions and our ability to maintain financial stability, we may not have access to additional funds on reasonable terms or at all. Any inability to obtain additional funds when needed would have an adverse effect on our business and on our ability to operate on an ongoing basis.

Our independent auditor's report for the fiscal year ended December 31, 2013 includes an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern.

Due to the uncertainty of our ability to meet our current operating and capital expenses, in their report on our audited annual financial statements as of and for the year ended December 31, 2013, our independent auditors included an explanatory paragraph regarding concerns about our ability to continue as a going concern. Recurring losses from

operations raise substantial doubt about our ability to continue as a going concern. If we are unable to continue as a going concern, we might have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements. In addition, the inclusion of an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern and our lack of cash resources may materially adversely affect our share price and our ability to raise new capital or to enter into critical contractual relations with third parties.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights.

We may seek additional capital through a combination of private and public equity offerings, debt financings and collaboration, strategic and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder.

Additional debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration, strategic alliance and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

Risks Relating to Technology

We are dependent on new and unproven technologies.

Our risks as an early stage company are compounded by our heavy dependence on unproven technologies. If these technologies do not produce satisfactory results in the clinical trial setting and/or are unable to gain regulatory approval, our business may be harmed. We have not shown an ability to bring any therapeutic candidate through the regulatory process to marketing approval. Given the unproven nature of our technology and potential product candidates, the FDA or other regulatory agency may require additional clinical data or manufacturing practices than that required of other conventional therapies. Additionally some of our technologies and potential revenue sources involve ethically sensitive and controversial issues which could become the subject of legislation or regulations materially restricting our development programs, future sales and marketing and other operations and, therefore, harm our financial condition and operating results.

We may not be able to commercially develop our technologies and proposed product lines, which, in turn, would significantly harm our ability to earn revenues and result in a loss of investment.

Our ability to commercially develop our technologies may be limited in part by a number of factors including, but not limited to, general economic conditions, the success of our research and pre-clinical and field testing, the availability of collaborative partners willing and able finance our work in pursuing applications of cell therapy technologies, and technological or other developments in the biomedical field which may render out technologies obsolete or competitively unattractive. We may not pursue one or more commercialization strategies at all if we cannot locate a collaborative partner or entity willing to fund research and development or if we cannot agree to acceptable terms governing a potential development or marketing collaboration. Our decisions regarding the ultimate products and/or services we pursue could have a significant adverse effect on our ability to earn revenue if we misinterpret trends, underestimate development costs and/or pursue wrong products or services. Any of these factors either alone or in concert could materially harm our ability to earn revenues or could result in a loss of any investment in us.

We face intense competition and rapid technological change and the possibility that our competitors may develop therapies that are more advanced or effective than ours, which may adversely affect our financial condition and our ability to successfully commercialize our product candidates.

We are engaged in activities in the biotechnology field, which is characterized by extensive research efforts and rapid technological progress. If we fail to anticipate or respond adequately to technological developments, our ability to operate profitably could suffer. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis, products that are more effective or less costly than any product candidate that we may develop, or achieve earlier patent protection, regulatory approval, product commercialization and market penetration than us. Additionally, technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing our product candidates against competitors. We cannot assure you that research and discoveries by other biotechnology, agricultural, pharmaceutical or other companies will not render our technologies or potential products or services uneconomical or result in products superior to those we develop or that any technologies, products or services we develop will be preferred to any existing or newly-developed technologies, products or services.

We are aware that several companies and non-profit entities are working on various RPE formulations for treating macular degeneration. For example, Pfizer, Regenerative Patch Technologies and the Riken Center for Developmental Biology (Japan) have publicly stated that each is working towards clinical trials of RPE patches (sheets of cells) for treating wet AMD, and have also stated that they believe their formulations of RPE cells could potentially be used for treating dry AMD. Cell Cure Neurosciences Ltd. (Israel) has previously announced that it is developing RPE cell formulations for dry AMD.

Other cell types are also being developed for subretinal use in treating various forms of macular degeneration. StemCells Inc. recently commenced treating dry AMD patients with purified human neural stem cells. Bioheart, Inc. sponsors an active clinical trial for treating dry AMD with adipose stem cell (ASC), while the University of California Davis and Retinal Associates of South Florida are the sponsors of FDA approved pilot studies to determine whether it would be safe and feasible to inject CD34+ stem cells from bone marrow into the eye as treatment for patients who are irreversibly blind from various retinal conditions including dry AMD. Neurotech, Inc. recently completed a phase I study testing the safety of injecting encapsulated cells that express CNTF in dry AMD patients, while Janssen Research & Development, LLC suspended its safety study of umbilical cord stem cells administered subretinally in dry AMD patients.

The biotechnology industries are characterized by rapidly evolving technology and intense competition. Our competitors include major multinational pharmaceutical companies, specialty biotechnology companies and chemical and medical products companies operating in the fields of regenerative medicine, cell therapy, tissue engineering and tissue regeneration.

Many of these companies are well-established and possess technical, research and development, financial and sales and marketing resources significantly greater than ours. In addition, certain smaller biotech companies have formed strategic collaborations, partnerships and other types of joint ventures with larger, well established industry competitors that afford these companies' potential research and development and commercialization advantages. Academic institutions, governmental agencies and other public and private research organizations are also conducting and financing research activities which may produce products directly competitive to those we are developing. Moreover, many of these competitors may be able to obtain patent protection, obtain FDA and other regulatory approvals and begin commercial sales of their products before we do.

The diseases and medical conditions we are targeting have no effective long-term therapies. Nevertheless, we expect that our technologies and products will compete with a variety of therapeutic products and procedures offered by major pharmaceutical companies. Many pharmaceutical and biotechnology companies are investigating new drugs and therapeutic approaches for the same purposes, which may achieve new efficacy profiles, extend the therapeutic window for such products, alter the prognosis of these diseases or prevent their onset.

We believe that our products, when and if successfully developed, will compete with these products principally on the basis of improved and extended efficacy and safety and their overall economic benefit to the health care system. Competition for any stem cell products that we may develop may be in the form of existing and new drugs, other forms of cell transplantation, ablative and simulative procedures and gene therapy. We believe that some of our competitors are also trying to develop stem and progenitor cell-based technologies. We expect that all of these products will compete with our potential stem cell products based on efficacy, safety, cost and intellectual property positions. We may also face competition from companies that have filed patent applications relating to the use of genetically modified cells to treat disease, disorder or injury. In the event our therapies should require the use of such genetically modified cells, we may be required to seek licenses from these competitors in order to commercialize certain of our proposed products, and such licenses may not be granted.

If we develop products that receive regulatory approval, they would then have to compete for market acceptance and market share. For certain of our potential products, an important success factor will be the timing of market introduction of competitive products. This timing will be a function of the relative speed with which we and our competitors can develop products, complete the clinical testing and approval processes and supply commercial quantities of a product to market. These competitive products may also impact the timing of clinical testing and approval processes by limiting the number of clinical investigators and patients available to test our potential products.

Our competition includes both public and private organizations and collaborations among academic institutions and large pharmaceutical companies, most of which have significantly greater experience and financial resources than we do.

Private and public academic and research institutions also compete with us in the research and development of therapeutic products based on human embryonic and adult stem cell technologies. In the past several years, the pharmaceutical industry has selectively entered into collaborations with both public and private organizations to explore the possibilities that stem cell therapies may present for substantive breakthroughs in the fight against disease.

Many of our competitors have significantly greater experience than we have in the development, pre-clinical testing and human clinical trials of biotechnology and pharmaceutical products, in obtaining FDA and other regulatory approvals of such products and in manufacturing and marketing such products.

Accordingly our competitors may succeed in obtaining FDA approval for products more rapidly or effectively than we can. Our competitors may also be the first to discover and obtain a valid patent to a particular stem cell technology which may effectively block all others from doing so. It will be important for us or our collaborators to be the first to discover any stem cell technology that we are seeking to discover. Failure to be the first could prevent us from commercializing all of our research and development affected by that discovery. Additionally, if we commence commercial sales of any products, we will also be competing with respect to manufacturing efficiency and sales and marketing capabilities, areas in which we have no experience.

Risks Related to Intellectual Property

Certain aspects of our business are dependent upon maintaining licenses with respect to key technology; if we are unable to obtain or protect intellectual property rights related to our product candidates, we may not be able to compete effectively in our markets.

Several of the patents we utilize are licensed to us by third parties. These licenses are subject to termination under certain circumstances (including, for example, our failure to make minimum royalty payments or to timely achieve spending, development and commercialization benchmarks). The loss of any of such licenses, or the conversion of such licenses to non-exclusive licenses, could harm our operations and/or enhance the prospects of our competitors. Certain of these licenses also contain restrictions, such as limitations on our ability to grant sublicenses that could materially interfere with our ability to generate revenue through the licensing or sale to third parties of important and valuable technologies that we have, for strategic reasons, elected not to pursue directly. The possibility exists that in the future we will require further licenses to complete and/or commercialize our proposed products. We cannot assure you that we will be able to acquire any such licenses on a commercially viable basis.

Certain parts of our technology are not protectable by patent.

Certain parts of our know-how and technology are not patentable. To protect our proprietary position in such know-how and technology, we require all employees, consultants, advisors and collaborators to enter into confidentiality and invention ownership agreements with us. We cannot assure you, however, that these agreements will provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure. Further, in the absence of patent protection, competitors who independently develop substantially equivalent technology may harm our business.

Patent litigation presents an ongoing threat to our business with respect to both outcomes and costs.

Companies in the life science industry typically obtain patents and frequently engage in substantial intellectual property litigation. Our products and technologies could infringe on the rights of others. If a third party successfully asserts a claim for infringement against us, we may be liable for substantial damages, be unable to sell products using that technology, or have to seek a license or redesign the related product. These alternatives may be uneconomical or impossible. Intellectual property litigation could be costly, result in product development delays and divert the efforts and attention of management from our business. We may also be unable to obtain licenses needed to develop its technology or for certain intellectual property needed to develop and commercialize its products.

In addition to our ability to avoid infringing the proprietary rights of others, our success will also depend, in part, on our ability to maintain protection for our products and technologies under the patent laws of the United States and other countries. Our patent rights could be challenged by others, or if issued, could later be deemed invalid or unenforceable. Patent prosecution, related proceedings, and litigation in the U.S. and in other countries may be expensive, time consuming and ultimately unsuccessful. In addition, patents issued by foreign countries may afford less protection than is available under U.S. patent law and may not adequately protect our proprietary information. We have previously been involved in patent interference litigation, and it is possible that further litigation or patent office proceedings (such as oppositions, observations and/or reexaminations) over one or more of our own patent filings could arise. We could incur substantial litigation costs or costs associated with patent office proceedings in defending ourselves against suits or other actions brought against us or in suits in which we may assert our patents against others. If the outcome of any such litigation or patent office proceeding is unfavorable, our business could be materially adversely affected. The expiration of patents on which we rely for protection of key products could diminish our competitive advantage and adversely affect its business and prospects. Our competitors may independently develop proprietary technologies and processes that design around the coverage our patents.

If we or one of our licensing partners initiated legal proceedings against a third party to enforce a patent covering one of our therapeutic candidates, the defendant could counterclaim that the patent covering our therapeutic candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the United States Patent and Trademark office, or USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover our therapeutic candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our therapeutic candidates. Such a loss of patent protection would have a material adverse impact on our business.

Without additional capital, we may not have the resources to adequately defend or pursue such litigation or patent office proceedings. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also 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 an adverse effect on the price of our common stock.

We may not be able to protect our proprietary technology, which could harm our ability to operate profitably.

The biotechnology and pharmaceutical industries place considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our success will depend, to a substantial degree, on our ability to obtain and enforce patent protection for our products, preserve any trade secrets and operate without infringing the proprietary rights of others. We cannot assure you that:

- we will succeed in obtaining any patents in a timely manner or at all, or that the breadth or degree of protection of any such patents will protect our interests, or that such patents would even be enforceable;

- the use of our technology will not infringe on the proprietary rights of others;

- patent applications relating to our potential products or technologies will result in the issuance of any patents or that, if issued, such patents will afford adequate protection to us or not be challenged invalidated or infringed;

- if issued, patents might not be declared as unenforceable or invalid by operation of law;

- patents will not issue to other parties, which may be infringed by our potential products or technologies; and

- we will continue to have the financial resources necessary to prosecute our existing patent applications, pay maintenance fees on patents and patent applications, or file patent applications on new inventions.

We are aware of certain patents that have been granted to others and certain patent applications that have been filed by others with respect to iPS cells and embryonic stem cells, and other stem cell technologies. The fields in which we operate have been characterized by significant efforts by competitors to establish dominant or blocking patent rights to gain a competitive advantage, and by considerable differences of opinion as to the value and legal legitimacy of competitors' purported patent rights and the technologies they actually utilize in their businesses.

Patents obtained by other persons may result in infringement claims against us that are costly to defend and which may limit our ability to use the disputed technologies and prevent us from pursuing research and development or commercialization of potential products.

A number of other pharmaceutical, biotechnology and other companies, universities and research institutions have potentially relevant to or required in the manufacturing, storage, sale or use of our expected products. In the case of pending patent application, we cannot predict which, if any, of such applications will issue as patents or the claims that might be allowed. We are aware that a number of companies have filed patent applications, which in some cases have resulted in issued patents, relating to the generation, formulation and uses of various stem cells, as well as RPE cells, photoreceptor progenitor cells, and mesenchymal stem cells.

If third party patents or patent applications contain claims infringed by us or any strategic partner or other licensee of our products, such as for the manufacturing, storage, sale or use of our expected products, and such patent claims are ultimately determined to be valid and enforceable against us or our licensees, there can be no assurance that we would be able to obtain licenses to these patents at a reasonable cost, if at all, or be able to develop or obtain alternative

technology. If we are unable to obtain such licenses at a reasonable cost, we may not be able to develop some products commercially. We may be required to defend ourselves in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties, or require us or our licensees to cease using such technology.

Changes in U.S. patent law and in patent law in other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biotechnology companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biotechnology industry involve both technological and legal complexity, and is therefore obtaining and enforcing biotechnology patents is costly, time-consuming and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide-ranging patent reform legislation. Recent U.S. Supreme Court rulings and rulings from the European Patent Office Board of Appeals have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations, including potentially relating to the patentability of cells and tissues generated from hESC lines. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, and equivalents bodies in other major markets, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

We may not be able to adequately defend against piracy of intellectual property in foreign jurisdictions.

Considerable research in the areas of stem cells, cell therapeutics and regenerative medicine is being performed in countries outside of the United States, and a number of potential competitors are located in these countries. The laws protecting intellectual property in some of those countries may not provide adequate protection to prevent our competitors from misappropriating our intellectual property. Several of these potential competitors may be further along in the process of product development and also operate large, company-funded research and development programs. As a result, our competitors may develop more competitive or affordable products, or achieve earlier patent protection or product commercialization than we are able to achieve. Competitive products may render any products or product candidates that we develop obsolete.

Regulatory Risks

We cannot market our product candidates until we receive regulatory approval; even if we complete the necessary preclinical and clinical studies, we cannot predict when or if we will obtain regulatory approval to commercialize a product candidate or the approval may be for a more narrow indication than we expect.

Development of our products is subject to extensive regulation by governmental authorities in the United States and other countries. The process of obtaining regulatory approval is lengthy, expensive and uncertain. In the United States, the FDA imposes substantial requirements on the introduction of biological products and many medical devices through lengthy and detailed laboratory and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these requirements typically takes several years and the time required to do so may vary substantially based upon the type and complexity of the biological product or medical device.

Product candidates that we believe should be classified as medical devices for purposes of the FDA regulatory pathway may be determined by the FDA to be biologic products subject to the satisfaction of significantly more stringent requirements for FDA approval. Any difficulties that we encounter in obtaining regulatory approval may have a substantial adverse impact on our business and cause our stock price to significantly decline.

If we fail to obtain regulatory approval of any of our product candidates for at least one indication, we will not be permitted to market our product candidates and may be forced to cease our operations. Even if our product candidates demonstrate safety and efficacy in clinical studies, the regulatory agencies may not complete their review processes in a timely manner, or we may not be able to obtain regulatory approval at all. Additional delays may result if an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on any approved indications. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory agency policy during the period of product

development, clinical studies and the review process. Regulatory agencies also may approve a treatment candidate for fewer or more limited indications than requested or may grant approval subject to the performance of post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our treatment candidates.

Even if we obtain regulatory approval for a product candidate, our products will remain subject to regulatory scrutiny.

Even if we obtain regulatory approval in a jurisdiction, the regulatory authority may still impose significant restrictions on the indicated uses or marketing of our product candidates, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. Conditions of approval, such as limiting the category of patients who can use the product, may significantly impact our ability to commercialize the product and may make it difficult or impossible for us to market a product profitably. In addition, product manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with good manufacturing practices, or GMP, and adherence to commitments made to the FDA in the approval process. If we or a regulatory agency discovers previously unknown problems with a product such as adverse events of unanticipated severity or frequency, problems with the facility where the product is manufactured or manufacturing issues, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

FDA approval of our products may also entail ongoing requirements for post-marketing studies, or limit how or to whom the Company can sell its products. Even if we obtain regulatory approval, labeling, promotional and manufacturing activities are subject to continual scrutiny by the FDA, state regulatory agencies and, in some circumstances, the Federal Trade Commission. In addition, FDA enforcement policy prohibits the marketing of approved products for unapproved, or off-label, uses. These regulations and the FDA’s and other third-party payers interpretation of them could materially increase the Company’s expenses, impair its ability to effectively market its products, and limit our revenue.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. In addition, if our product candidates are approved by the FDA or other regulatory authorities for the treatment of any indications, regulatory labeling may specify that our product candidates may be used in conjunction with other therapies. The occurrence of any of these events or penalties may inhibit our ability to commercialize our product candidates and generate revenues.

Once obtained, regulatory approvals may be withdrawn and can be expensive to maintain.

Regulatory approval may be withdrawn for a number of reasons, including the later discovery of previously unknown problems with the product. Regulatory approval may also require costly post-marketing follow-up studies, and failure of our product candidates to demonstrate sufficient efficacy and safety in these studies may result in either withdrawal of marketing approval or severe limitations on permitted product usage. In addition, numerous additional regulatory requirements relating to, among other things, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping will also apply. Furthermore, regulatory agencies subject a marketed product, its manufacturer and the manufacturer's facilities to continual review and periodic inspections. Compliance with these regulatory requirements is time-consuming and requires the expenditure of substantial resources.

If any of our product candidates is approved, we will be required to report certain adverse events involving our products to the FDA, to provide updated safety and efficacy information and to comply with requirements concerning the advertisement and promotional labeling of our products. As a result, even if we obtain necessary regulatory approvals to market our product candidates for any indication, any adverse results, circumstances or events that are subsequently discovered could require that we cease marketing the product for that indication or expend additional money, time and effort to ensure full compliance, which could have an adverse effect on our business or results of operations.

If our products do not comply with applicable laws and regulations our business will be harmed.

Any failure by us, or by any third parties that may manufacture or market our products, to comply with the law, including statutes and regulations administered by the FDA or other U.S. or foreign regulatory authorities, could result in, among other things, warning letters, fines and other civil penalties, suspension of regulatory approvals and the resulting requirement that we suspend sales of our products, refusal to approve pending applications or supplements to approved applications, export or import restrictions, interruption of production, operating restrictions, closure of the facilities used by us or third parties to manufacture our product candidates, injunctions or criminal prosecution. Any of the foregoing actions could have an adverse effect on our business.

The Company may incur substantial liabilities from product liability claims.

If we obtain FDA approval to conduct human clinical trials for any of its products, it will face the risk of product liability exposure related to such testing. Such risks will be even greater if any of our products are sold commercially. An individual may bring a claim against us if one of its products causes, or merely appears to have caused some causal relationship to, an injury. If we cannot successfully defend itself against a product liability claim, it may incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- a clinical hold on further patient testing in the trial;
- damage to our reputation and decreased demand for its products;
- withdrawal of participants from our clinical trials;
- substantial costs of arising from the defense of the claim;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- increased difficulty in entering into strategic relationships.

The commercial success of any current or future product candidate will depend upon the degree of market acceptance by physicians, patients, third-party payors and others in the medical community, and our products may not be accepted in the marketplace.

If we are successful in obtaining regulatory approval for any of our product candidates, the degree of market acceptance of those products will depend on many factors, including:

- Our ability to provide acceptable evidence of, and the perception of patients and the healthcare community, including third party payors, of, the potential advantages of our product candidates relative to existing treatment methods;
- The incidence and severity of any adverse side effects of our product candidates;
- The availability and efficacy of alternative treatments;
- The labeling requirements imposed by the FDA and foreign regulatory agencies on our products and related marketing materials, including the scope of approved indications and any safety warnings;
- Our ability to obtain sufficient third party insurance coverage or reimbursement for our product candidates;
- The inclusion of our products on insurance company coverage policies;
- The willingness and ability of patients and the healthcare community to adopt new technologies;
- Public opinion and acceptance of stem cell therapy in general, including media coverage and activism by religious, social or political groups;
- The procedure time associated with the use of our product candidates, including time between and frequency of dosage;
- Our ability to manufacture or obtain from third party manufacturers sufficient quantities of our product candidates with acceptable quality and at an acceptable cost to meet demand; and
- Internal or external marketing and distribution support for our products.

We cannot predict or guarantee that physicians, patients, healthcare insurers, third party payors or health maintenance organizations, or the healthcare community in general, will accept or utilize any of our product candidates. Failure to achieve market acceptance would limit our ability to generate revenue and would have a material adverse effect on our business. In addition, if any of our product candidates achieve market acceptance, we may not be able to maintain that market acceptance over time if competing products or technologies are introduced that are received more favorably or are more cost-effective.

Restrictions on the use of human embryonic stem cells, the ethical, legal and social implications of stem cell research, and negative public opinion about stem cell therapy may damage public perception of our therapeutic candidates and could prevent us from developing or gaining acceptance for commercially viable products.

Some of our most important programs involve the use of stem cells that are derived from human embryos. The use of human embryonic stem cells gives rise to ethical, legal and social issues regarding the appropriate derivation of these cells. In the event that our research related to human embryonic stem cells becomes the subject of adverse commentary or publicity or increased scrutiny by governmental or regulatory organizations, our business could be harmed or otherwise substantially impaired, and the market price for our common stock could be significantly harmed. Some political and religious groups have voiced opposition to our technology and practices. We use stem cells derived from human embryos that have been created for in vitro fertilization procedures but are no longer desired or suitable for that use and are donated with appropriate informed consent for research use. Many research institutions, including some of our scientific collaborators, have adopted policies regarding the ethical use of human embryonic tissue. These policies may have the effect of limiting the scope of research conducted using human embryonic stem cells, thereby impairing our ability to conduct research in this field.

Governmental regulations and laws could change.

There can be no assurance that our operations will not be restricted by any future legislative or administrative efforts by politicians or groups opposed to the development of human embryonic stem cell technology or nuclear transfer technology. Additionally, the scope of the Dickey–Wicker Amendment, a 16-year-old ban on U.S. federal funding for activity related to the harm or destruction of an embryo, was recently under review by the federal courts and while it was determined not to preclude funding of human embryonic stem cell research by the federal government, there can be no assurance that it will not be challenged again or the language modified by Congress so as to restrict government funding of human embryonic stem cell research. Judicial review of this or other U.S. federal or state laws, the occurrence and results of which are difficult to predict with any certainty, could result in a more restrictive interpretation of those laws than is previously the case, and may limit or require us to terminate certain of our research and therapeutic programs.

Because we or our collaborators must obtain regulatory approval to market our products in the United States and other countries, we cannot predict whether or when we will be permitted to commercialize our products.

Federal, state and local governments in the United States and governments in other countries have significant regulations in place that govern many of our activities. We are or may become subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances used in connection with our research and development work. The preclinical testing and clinical trials of the products that we or our collaborators develop are subject to extensive government regulation that may prevent us from creating commercially viable products from our discoveries. In addition, the sale by us or our collaborators of any commercially viable product will be subject to government regulation from several standpoints, including manufacturing, advertising and promoting, selling and marketing, labeling and distributing.

If, and to the extent that, we are unable to comply with these regulations, our ability to earn revenues will be materially and negatively impacted. The regulatory process, particularly in the biotechnology field, is uncertain, can take many years and requires the expenditure of substantial resources. Biological drugs and non-biological drugs are rigorously regulated. In particular, proposed human pharmaceutical therapeutic product candidates are subject to rigorous preclinical and clinical testing and other requirements by the FDA in the United States and similar health authorities in other countries in order to demonstrate safety and efficacy. We may never obtain regulatory approval to market our proposed products.

Our products may not receive FDA approval, which would prevent us from commercially marketing our products and producing revenues.

The FDA and comparable government agencies in foreign countries impose substantial regulations on the manufacture and marketing of pharmaceutical products through lengthy and detailed laboratory, pre-clinical and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these regulations typically takes several years or more and varies substantially based upon the type, complexity and novelty of the proposed product. We cannot assure you that FDA approvals for any products developed by us will be granted on a timely basis, if at all. Any such delay in obtaining, or failure to obtain, such approvals could have a material adverse effect on the marketing of our products and our ability to generate product revenue.

We may not be able to obtain required approvals in countries other than the United States.

The requirements governing the conduct of clinical trials and cell culturing as well as the marketing approval process for our product candidates outside the United States vary widely from country to country. Foreign approvals may take longer to obtain than FDA approvals and can require, among other things, additional testing and different clinical trial designs. Foreign regulatory approval processes generally include all of the risks associated with the FDA approval processes. Some foreign regulatory agencies also must approve prices of the products. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others. We may not be able to file for regulatory approvals and may not receive necessary approvals to market our product candidates in any foreign country. If we fail to comply with these regulatory requirements or fail to obtain and maintain required approvals in any foreign country, we will not be able to sell our product candidates in that country and our ability to generate revenue will be adversely affected.

Financial Risks

We may not be able to raise the required capital to conduct our operations and develop and commercialize our products.

We require substantial additional capital resources in order to conduct our operations and develop and commercialize our products and run our facilities. We will need significant additional funds, a collaborative partner, or both, to finance the research and development activities of our therapies and potential products. Accordingly, we are continuing to pursue additional sources of financing. Our future capital requirements will depend upon many factors, including:

- The continued progress and cost of our research and development programs;
- The progression, timing and results of our pre-clinical studies and clinical trials;
- The time and costs involved in obtaining regulatory clearance;
- The costs in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- The costs of developing sales, marketing and distribution channels and our ability to sell the therapies/products if developed;
- The costs involved in establishing manufacturing capabilities for commercial quantities of our proposed products;
- Competing technological and market developments;
- Market acceptance of our proposed products;
- Costs associated with defending any litigation or regulatory investigations, including SEC investigations, investor litigation, or litigation regarding potential infringement by us of third-party intellectual property rights;
- The costs for recruiting and retaining employees and consultants; and

· The costs for educating and training physicians about our proposed therapies/products.

Additional financing through strategic collaborations, public or private equity financings or other financing sources may not be available on acceptable terms, or at all. Additional equity financing could result in significant dilution to our shareholders. Further, if additional funds are obtained through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or products that we would otherwise seek to develop and commercialize on our own. If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of our programs or potential products, any of which could have an adverse effect on our financial condition or business prospects.

Risks Related to Third Party Reliance

We depend on third parties to assist us in the conduct of our preclinical studies and clinical trials, and any failure of those parties to fulfill their obligations could result in costs and delays and prevent us from obtaining regulatory approval or successfully commercializing our product candidates on a timely basis, if at all.

We engage consultants and contract research organizations to help design, and to assist us in conducting, our preclinical studies and clinical trials and to collect and analyze data from those studies and trials. The consultants and contract research organizations we engage interact with clinical investigators to enroll patients in our clinical trials. As a result, we depend on these consultants and contract research organizations to perform the studies and trials in accordance with the investigational plan and protocol for each product candidate and in compliance with regulations and standards, commonly referred to as “good clinical practice”, for conducting, recording and reporting results of clinical trials to assure that the data and results are credible and accurate and the trial participants are adequately protected, as required by the FDA and foreign regulatory agencies. We may face delays in our regulatory approval process if these parties do not perform their obligations in a timely or competent fashion or if we are forced to change service providers.

We depend on our collaborators to help us develop and test our proposed products, and our ability to develop and commercialize products may be impaired or delayed if collaborations are unsuccessful.

Our strategy for the development, clinical testing and commercialization of our proposed products requires that we enter into collaborations with corporate partners, licensors, licensees and others. We are dependent upon the subsequent success of these other parties in performing their respective responsibilities and the continued cooperation of our partners. Under agreements with collaborators, we may rely significantly on such collaborators to, among other things:

- Design and conduct advanced clinical trials in the event that we reach clinical trials;
- Fund research and development activities with us;
- Pay us royalties or fees upon the achievement of milestones; and
- Market with us any commercial products that result from our collaborations.

Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of our collaborators' resources that will be devoted to supporting our research and development activities related to or any diligence obligations on the part of these collaborators under our collaborative agreements with them. Our collaborators may choose to pursue existing or alternative technologies in preference to those being developed in collaboration with us. The development and commercialization of potential products will be delayed if collaborators fail to conduct these activities in a timely manner, or at all. In addition, our collaborators could terminate their agreements with us and we may not receive any development or milestone payments. If we do not achieve milestones set forth in the agreements, or if our collaborators breach or terminate their collaborative agreements with us, our business may be materially harmed

Our reliance on the activities of our non-employee consultants, research institutions, and scientific contractors, whose activities are not wholly within our control, may lead to delays in development of our proposed products.

We rely extensively upon and have relationships with scientific consultants at academic and other institutions, some of whom conduct research at our request, and other consultants with expertise in clinical development strategy or other matters. These consultants are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We have limited control over the activities of these consultants and, except as otherwise required by our collaboration and consulting agreements to the extent they exist, can expect only limited amounts of their time to be dedicated to our activities. These research facilities may have

commitments to other commercial and non-commercial entities. We have limited control over the operations of these laboratories and can expect only limited amounts of time to be dedicated to our research goals.

Preclinical & Clinical Product Development Risks

We have limited experience in conducting and managing preclinical development activities, clinical trials and the application process necessary to obtain regulatory approvals.

Our limited experience in conducting and managing preclinical development activities, clinical trials and the application process necessary to obtain regulatory approvals might prevent us from successfully designing or implementing a preclinical study or clinical trial. If we do not succeed in conducting and managing our preclinical development activities or clinical trials or in obtaining regulatory approvals, we might not be able to commercialize our product candidates, or might be significantly delayed in doing so, which will materially harm our business.

Our ability to generate revenues from any of our product candidates will depend on a number of factors, including our ability to successfully complete clinical trials, obtain necessary regulatory approvals and implement our commercialization strategy. In addition, even if we are successful in obtaining necessary regulatory approvals and bringing one or more product candidates to market, we will be subject to the risk that the marketplace will not accept those products. We may, and anticipate that we will need to, transition from a company with a research and development focus to a company capable of supporting commercial activities and we may not succeed in such a transition.

Because of the numerous risks and uncertainties associated with our product development and commercialization efforts, we are unable to predict the extent of our future losses or when or if we will become profitable.

Our failure to successfully commercialize our product candidates or to become and remain profitable could depress the market price of our common stock and impair our ability to raise capital, expand our business, diversify our product offerings and continue our operations.

None of the products that we are currently developing has been approved for marketing by the FDA or any similar regulatory authority in any foreign country, and may never be so approved. Our approach of using cell-based therapy for the treatment of retinal diseases such as Startgardt's disease and dry AMD is risky and unproven and no products using this approach have received regulatory approval in the United States or Europe.

We believe that no other company has yet been successful in its efforts to obtain regulatory approval in the United States or Europe of a cell-based therapy product for the treatment of retinal disease or degeneration in humans. Cell-based therapy products, in general, 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 by regulators or commercial use. Many companies in the industry have suffered significant setbacks in advanced clinical trials, despite promising results in earlier trials. If our clinical trials are unsuccessful or significantly delayed, or if we do not complete our clinical trials while achieving sufficiently satisfactory results, we will not receive regulatory approval for or be able to commercialize our product candidates.

Our lead product candidates, our therapeutic Retinal programs for Startgardt's disease and Dry AMD, have been in Phase I Clinical Trials and have not yet received market approval from the FDA or any similar foreign regulatory authority for any indication.

We cannot market any product candidate until regulatory agencies grant approval or licensure. In order to obtain regulatory approval for the sale of any product candidate, we must, among other requirements, provide the FDA and similar foreign regulatory authorities with preclinical and clinical data that demonstrate to the satisfaction of regulatory authorities that our product candidates are safe and effective for each indication under the applicable standards relating to such product candidate. The preclinical studies and clinical trials of any product candidates must comply with the regulations of the FDA and other governmental authorities in the United States and similar agencies in other countries. Our therapeutic Retinal programs may never receive market approval from the FDA or any similar foreign regulatory authority.

In addition, we may experience numerous unforeseen events during, or even if approved for clinical trials, as a result of, the clinical trial process that could delay or prevent regulatory approval and/or commercialization of our product

candidates, including the following:

- The FDA or similar foreign regulatory authorities may find that our product candidates are not sufficiently safe or effective or may find our cell culturing processes or facilities unsatisfactory;

- Officials at the FDA or similar foreign regulatory authorities may interpret data from preclinical studies and clinical trials differently than we do;

- Our clinical trials may produce negative or inconclusive results or may not meet the level of statistical significance required by the FDA or other regulatory authorities, and we may decide, or regulators may require us, to conduct additional preclinical studies and/or clinical trials or to abandon one or more of our development programs;

- The FDA or similar foreign regulatory authorities may change their approval policies or adopt new regulations;

- There may be delays or failure in obtaining approval of our clinical trial protocols from the FDA or other regulatory authorities or obtaining institutional review board approvals or government approvals to conduct or continue clinical trials at current or prospective sites;

- We, or regulators, may suspend or terminate our clinical trials because the participating patients are being exposed to unacceptable health risks or undesirable side effects;

- We may experience difficulties in managing multiple clinical sites;

- Enrollment in our clinical trials for our product candidates may occur more slowly than we anticipate, or we may experience high drop-out rates of subjects in our clinical trials, resulting in significant delays;

- We may be unable to manufacture or obtain from third party manufacturers sufficient quantities of our product candidates for use in clinical trials; and

- Our product candidates may be deemed unsafe or ineffective, or may be perceived as being unsafe or ineffective, by healthcare providers for a particular indication.

Any failure or delay in obtaining regulatory approval will negatively affect our financial results and harm our business.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our principal executive offices are located in Marlborough, Massachusetts, where we lease approximately 30,000 square foot of office and laboratory facilities, pursuant to two separate leases, in different suites of the same building. The first lease agreement relates to 12,257 square feet of office and laboratory facilities, requires a monthly rent payment of $14,771 and continues until July 31, 2015. The second lease agreement relates to 17,696 of office and laboratory facilities, requires a monthly rent payment of $21,383 started in April 2013 (with scheduled increases thereafter) and continues until March 31, 2018 with an option to extend the lease for an additional five year period. We also lease approximately 1,568 square feet of corporate office space in Santa Monica, California for $6,272 per month (with schedule increases thereafter), which lease continues until June 30, 2018. We have closed our Santa Monica office and we are in the process of consolidating all of our operations in our Marlborough, Massachusetts facility. We are exploring opportunities to sub-lease or to negotiate a buyout of our California lease.

Item 3. Legal Proceedings.

Camofi Master LDC v. Advanced Cell Technology, Inc., Index No. 652816-2011 (N.Y. Sup.)

CAMOFI Master LDC and CAMZHN Master LDC, or the "CAMOFI Parties, filed their Complaint on October 13, 2011. In their Complaint, the CAMOFI Parties argue that as a result of the transactions between the Company and JMJ, Gemini Master Fund, Ltd. and Midsummer Investment, Ltd. respectively, the exercise prices in their Warrants and debentures should have been reduced. Consequently, the CAMOFI Parties argue that they have been denied the right to receive, in total, at least 130,795,594 shares of the Company's common stock, which has allegedly resulted in losses to the CAMOFI Parties of at least $22,265,951.

On January 11, 2013, the Company entered into a settlement agreement and mutual release, or the “Settlement Agreement, with the CAMOFI Parties. The Settlement Agreement relates to the lawsuit between the CAMOFI Parties, as plaintiffs, and the Company, as defendant, in the Supreme Court of New York, New York County, docket number 652816/2011, in which the CAMOFI Parties claim that the conversion price of certain notes and the exercise price of certain warrants held by the Settling Parties should have been adjusted as a result of certain transactions between the Company and JMJ Financial, Inc. during 2010.

Pursuant to the settlement agreement, and subject to court approval, we agreed, in exchange for dismissal of the pending lawsuit with prejudice and a mutual release of all claims, to do the following on the business day following approval by the Court of the settlement or on another day agreed upon by the parties to the settlement:

- issue to the CAMOFI Parties an aggregate number of shares of our common stock calculated by dividing $4,500,000 by the least of (a) $0.056 per share, (b) the closing price of the common stock on the day immediately prior to the execution of the Settlement Agreement or (c) the VWAP reported by Bloomberg LP for the 30-day period before such shares of common stock are received, of which 78.9% of such shares will be issued to CAMOFI and 21.1% to CAMHZN;

- issue (a) to CAMOFI a debenture in the principal amount of $4,732,781 and (b) to CAMHZN a debenture in the original principal amount of $1,267,219;

- pay $1,577,594 to CAMOFI and $422,406 to CAMHZN; and

- reimburse the CAMOFI Parties for certain of the CAMOFI Parties' costs incurred in connection with the pending lawsuit.

On January 22, 2013, the Supreme Court of New York approved the issuance of the shares of our common stock that we agreed to issue to the CAMOFI Parties pursuant to the settlement agreement and Mutual Release that was entered into on January 11, 2013. Accordingly, on January 23, 2013, we issued an aggregate of 80,357,143 shares to the CAMOFI Parties as required by the settlement agreement and in reliance upon the exemption from registration under Section 3(a)(10) of the Securities Act of 1933, as amended, or the Securities Act.

Warrant Holder Claim

On July 13, 2011, we received a copy of Gary D. Aronson's Creditor's Claim, or the Claim, in the amount of $27,909,706, against the Estate of William Caldwell or Decedent, who at the time of his death was our Chief Executive Officer and Chairman of the Board of Directors. The Claim states that Decedent's liability arose under a cause of action that the Claimant intended to file in Federal court against the Company for violations of the Securities Exchange Act of 1934, as amended, or the Exchange Act, including Section 10(b) of the Exchange Act and the rules promulgated thereunder.

In the Claim, the Claimant alleged that in September 2005 he entered into a Settlement Agreement with the Company pursuant to which he received a warrant to purchase shares of the Company's Common Stock. In the Claim, the Claimant made several allegations against the Company, including that in reliance on misinformation provided to him

by the Decedent he exercised his warrant to purchase the Company's Common Stock at an inflated price and received fewer shares than he was owed by the Company under the terms of his warrant; that the Company breached the Claimant's warrant by not timely issuing stock after the warrant had been exercised; and that the Company failed to provide proper notice of certain events that allegedly triggered the Claimant's claimed right to additional shares under the warrant. Claimant previously had brought an action against the Company, in October 2007, with respect to a dispute over the interpretation of the warrant, but dismissed that action without prejudice the day before trial was to begin.

On August 23, 2011, Gary Aronson filed suit in federal court in Massachusetts against Advanced Cell Technology, Inc. and Wilmington Trust, N.A., as Special Administrator of the Estate of the Decedent. The suit reasserted allegations made in the Claim. On August 25, 2011, John S. Gorton filed a substantially similar lawsuit. Aronson and Gorton then filed substantially similar First Amended Complaints.

The Company and Decedent moved to dismiss Aronson's and Gorton's First Amended Complaints. On July 16, 2012, a United States Magistrate Judge issued a report and recommendation concerning the Company's and Decedent's motions to dismiss. The district court adopted the report and recommendation, dismissing all claims, including those asserting material misrepresentations in violation of the Exchange Act, except for one breach-of-contract claim against the Company concerning a warrant allegedly issued to William Woodward in breach of the warrants issued to Aronson and Gorton. Aronson and Gorton filed motions for leave to file Second Amended Complaints on October 23, 2012 and October 25, 2012. The Company did not oppose the motions. The Second Amended Complaints, deemed filed as of November 9 and 12, 2012, reasserted the claim for breach of contract with respect to the Woodward warrant, as well as new breach-of-contract claims against the Company related to a warrant allegedly issued to Deron Colby; an alleged extension of the exercise periods for stock warrants issued to Andwell, LLC and Nancy Burrows; and alleged stock sales in 2008 that were until recently part of the subject matter of an action pending in the United States District Court for the Middle District of Florida, *S.E.C. v. Lefkowitz*. The Second Amended Complaints asserted no claims against the Decedent. The Company moved to dismiss the second, third, and fourth counts of the Second Amended Complaints on November 30, 2012. A United States Magistrate Judge issued a report and recommendation concerning the motion to dismiss. The district court adopted the report and recommendation, denying the motions to dismiss as to the second and third counts of the Second Amended Complaints, and granting the motion to dismiss the fourth count with leave to amend. On September 25 and 26, 2013, Aronson and Gorton filed their Third Amended Complaints. On October 15, 2013, the Company answered Aronson's Third Amended Complaint and moved to dismiss Gorton's Third Amended Complaint for lack of subject-matter jurisdiction.

Securities and Exchange Commission – Civil Action

In May 2012, we were named as a defendant in a civil action brought by the Securities and Exchange Commission, or SEC, related to transactions involving the sale and issuance of the Company's securities. The SEC alleges that the Company violated Section 5(a) and 5(c) of the Securities Act because certain sales of shares to outside organizations, completed in late 2008 and early 2009 under our former management, resulting in $3.5 million in proceeds to us, were neither registered under the Securities Act nor subject to an exemption from registration under Section 3(a)(10) of the Securities Act, as amended. In addition, the Company is alleged to have violated Section 13(a) of the Exchange Act of 1934, or the Exchange Act, because it did not disclose the sale and issuance of the shares to the SEC on a timely basis.

On December 23, 2013, we settled this civil action brought by the SEC. Under the terms of the settlement accepted by the SEC, the Company consented to entry of judgment under which it neither admits nor denies liability and has agreed to disgorgement of $3.5 million in proceeds from the transactions in question. In addition, the Company will pay approximately $587,000 in pre-judgment interest. The total amount due, approximately $4.1 million, will be paid over six equal quarterly installments. The first installment was placed into escrow in July 2013 and was applied as a payment in January 2014 to the aggregate amount due. The next installment will be due in late April 2014. In addition, the settlement permanently restrains and enjoins the Company from violations of Sections 5(a) and 5(c) of the Securities Act, Section 13(a) of the Exchange Act and Rule 13a-11 under the Exchange Act. The settlement remains subject to court approval.

Securities and Exchange Commission –Investigation

As previously disclosed by us in April 2013, it was determined that Gary Rabin, our then-Chief Executive Officer, failed to report 27 transactions in which Mr. Rabin sold shares of our common stock that took place between February 7, 2011 and January 10, 2013. Mr. Rabin filed a Form 4 under Section 16 of the Exchange Act on April 15, 2013 reporting the previously unreported sale transactions and correcting the total number of shares of our common stock that Mr. Rabin owned as of the date of filing of the Form 4. Our board of directors initiated an investigation into this matter upon becoming aware of it. The Company was advised by the SEC that it was investigating this matter, and the Company received and responded to requests for additional information from the SEC relating to such transactions and the Company's procedures regarding Section 16 filings. The Company cooperated with the SEC's investigation and supplied information to the SEC in response to its information requests. The Company has discussed a reasonable resolution of the matter with the SEC on behalf of the Company and the Company believes it is close to a resolution of this matter, although there can be no assurance that the matter will be resolved until such time as a resolution is completed. The Company has recorded an accrual of $375,000 as of December 31, 2013, related to the investigation. Mr. Rabin and the Company entered a separation agreement, as previously disclosed in the Company's 8-k filed on January 22, 2014. In connection with this investigation, Mr. Rabin received a Wells notice from the SEC in January 2014, which indicates that the SEC may bring a civil action against Mr. Rabin, and gave Mr. Rabin an opportunity to provide the SEC with information as to why such action should not be brought. Nothing set forth in the foregoing statement constitutes an express or implied admission by us of any liability under the Securities Act, the Exchange Act or otherwise.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Market Information

Our common stock is quoted on the OTCBB and OTCQB under the symbol "ACTC." For the periods indicated, the following table sets forth the high and low bid prices per share of our common stock. These prices represent inter-dealer quotations without retail markup, markdown or commission and may not necessarily represent actual transactions.

Fiscal Year 2013	High Bid	Low Bid
First Quarter	$0.10	$0.06
Second Quarter	$0.09	$0.06
Third Quarter	$0.08	$0.06
Fourth Quarter	$0.07	$0.05

Fiscal Year 2012	High Bid	Low Bid
First Quarter	$0.20	$0.08
Second Quarter	$0.09	$0.06
Third Quarter	$0.10	$0.05
Fourth Quarter	$0.08	$0.06

Trades of our common stock are subject to Rule 15g-9 of the Securities and Exchange Commission, known as the Penny Stock Rule. This rule imposes requirements on broker/dealers who sell securities subject to the rule to persons other than established customers and accredited investors. For transactions covered by the rule, brokers/dealers must make a special suitability determination for purchasers of the securities and receive the purchaser's written agreement to the transaction prior to sale. The SEC also has rules that regulate broker/dealer practices in connection with transactions in "penny stocks." Penny stocks generally are equity securities with a price of less than $5.00, other than securities registered on certain national securities exchanges or quoted on the NASDAQ system, provided that current price and volume information with respect to transactions in that security is provided by the exchange or system. The Penny Stock Rules requires a broker/dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document prepared by the Commission that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker/dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker/dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker/dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. These disclosure requirements have the effect of reducing the level of trading activity in the secondary market for our common stock. As a result of these rules, investors may find it difficult to sell their shares.

Stock Price Performance Graph

A five-year comparison of the performance of our common stock with a broad equity market index and a peer group is set forth below. The broad equity market index used is the Nasdaq Composite Index and the peer group is the Dow Jones U.S. Biotechnology Index. The below comparison assumes $100 was invested on January 1, 2008 and dividends are reinvested for all years ending December 31.

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Holders

As of March 3, 2014, there were approximately 226 stockholders of record of our common stock.

Dividends

We have never paid cash dividends and have no plans to do so in the foreseeable future. Our future dividend policy will be determined by our board of directors and will depend upon a number of factors, including our financial condition and performance, our cash needs and expansion plans, income tax consequences, and the restrictions that applicable laws, our current preferred stock instruments, and our future credit arrangements may then impose. Accrued dividends will be payable upon redemption for our Series B Preferred Stock and our Series C Preferred Stock.

Recent Sales of Unregistered Securities

On October 4, 2013, we issued a board member 1,000,000 shares of common stock valued at $143,000 as compensation for board services.

On December 31, 2013, we issued 1,000,000 shares of common stock valued at $185,000 to Gary Rabin, our then-Chief Executive Officer, pursuant to his employment agreement.

On December 31, 2013, we issued various board members 1,329,368 shares of common stock valued at $82,275 as compensation for board services.

We relied on the exemption from registration provided by Section 4(a)2 of the Securities Act, as amended, or the Securities Act, with respect to each of the issuances of unregistered securities set forth above.

Item 6. Selected Financial Data.

The consolidated statement of operations data for the years ended December 31, 2009, 2010, 2011, and 2012, and the consolidated balance sheet data as of December 31, 2009, 2010, 2011, and 2012, have been restated as set forth in this Annual Report on Form 10-K. You should read the following financial information together with the information under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes to these consolidated financial statements appearing elsewhere in this report on Form 10-K. The information presented in the following tables has been adjusted to reflect our restatement resulting from our review of certain warrant agreements and accounting and stock compensation accounting, as is more fully described in the “Explanatory Note Regarding Restatement” immediately preceding Part I, Item 1 and in Note 2, “Restatement of Consolidated Financial Statements,” of the Notes to Consolidated Financial Statements in Part II, Item 8. We have not amended our previously filed Annual Reports on Form 10-K or Quarterly Reports on Form 10-Q for the periods affected by the restatement. Historical results are not necessarily indicative of the results to be expected in future periods.

	Year Ended December 31,						
	2013	2012 As restated	2011 As restated	2010 As reported	Adjustments	As restated	2009 As repo
Revenue	$224,985	$466,487	$506,419	$725,044	$–	$725,044	$1,415,
Cost of revenue	82,436	117,436	343,950	216,600	–	216,600	500,89
Gross profit	142,549	349,051	162,469	508,444	–	508,444	915,08
Operating expenses:							
Research and development	11,564,768	14,158,936	9,753,759	8,439,343	159,040	8,598,383	3,531,
Grant reimbursements	–	–	–	(977,917)	–	(977,917)	(136,8
General and administrative expenses	12,057,067	11,432,866	7,435,709	15,506,191	(955,149)	14,551,042	3,439,
Change in estimate of accrued liabilities	–	–	–	(1,263,009)	–	(1,263,009)	–
Change in estimate of loss on settlement of litigation	6,228,621	–	–	–	–	–	–
Loss on settlement of litigation	–	–	294,144	11,132,467	–	11,132,467	4,903,
Total operating expenses	29,850,456	25,591,802	17,483,612	32,837,075	(796,109)	32,040,966	11,731
Loss from operations	(29,707,907)	(25,242,751)	(17,321,143)	(32,328,631)	796,109	(31,532,522)	(10,82
Non-operating income (expense):							
Interest income	165,918	15,581	35,114	16,724	–	16,724	4,661
Interest expense and late fees	(1,437,584)	(1,104,602)	(1,510,693)	(11,726,120)	–	(11,726,120)	(9,190
Finance gain (cost)	95,162	(7,015,470)	(54,984,170)	(4,332,277)	–	(4,332,277)	(1,705
Gain (loss) on disposal of fixed assets	(962,227)	(17,138)	–	9,500	–	9,500	–
Fines and penalties	438,587	(3,500,000)	–	–	–	–	–
Gain on extinguishment of debt	–	–	–	197,370	–	197,370	598,42
Loss attributable to equity	–	–	(820,000)	–	–	–	(144,4

method investments							
Loss on extinguishment of convertible debentures	–	–	–	–	–	–	(8,200
Charges related to repricing derivative liabilities	–	–	–	–	–	–	(30,31
Loss on warrant re-pricing	–	–	–	–	–	–	(83,68
Adjustments to fair value of unsettled warrant obligation	(107,438)	1,390,382	7,963,101	–	(7,331,109)	(7,331,109)	–
Adjustments to fair value of derivatives	493,241	889,883	11,444,988	(6,209,898)	–	(6,209,898)	23,10
Total non-operating expense	(1,314,341)	(9,341,364)	(37,871,660)	(22,044,701)	(7,331,109)	(29,375,810)	(25,93
Loss before provision for income tax	(31,022,248)	(34,584,115)	(55,192,803)	(54,373,332)	(6,535,000)	(60,908,332)	(36,75
Provision for income tax	–	–	–	–	–	–	–
Net loss	$(31,022,248)	$(34,584,115)	$(55,192,803)	$(54,373,332)	$(6,535,000)	$(60,908,332)	$(36,75
Loss per share:							
Basic	$(0.01)	$(0.02)	$(0.03)	$(0.04)	$(0.01)	$(0.05)	$(0.07
Diluted	(0.01)	(0.02)	(0.03)	(0.04)	(0.01)	(0.05)	(0.07
Weighted average shares outstanding:							
Basic	2,491,872,696	2,086,619,741	1,582,095,095	1,218,190,921	1,218,190,921	1,218,190,921	521,34
Diluted	2,491,872,696	2,086,619,741	1,582,095,095	1,218,190,921	1,218,190,921	1,218,190,921	521,34

	As of December 31,								
	2013	2012	2011			2010			200
		As restated	As reported	Adjustments	As restated	As reported	Adjustments	As restated	As r
Balance Sheet Data:									
Cash and cash equivalents	$1,743,485	$7,241,852	$13,103,007	$–	$13,103,007	$15,889,409	$–	$15,889,409	$2,5
Current assets	2,911,859	7,552,756	13,406,690	–	13,406,690	15,981,007	–	15,981,007	2,6

Total assets	3,907,919	8,496,542	15,185,326	–	15,185,326	19,054,152	–	19,054,152	5,0
Current liabilities	22,916,789	23,490,235	55,749,567	2,432,218	58,181,785	11,344,705	13,145,436	24,490,141	24
Total non-current liabilities	3,524,740	6,551,988	4,130,477	–	4,130,477	30,090,096	–	30,090,096	25
Total liabilities	26,441,529	30,042,223	59,880,044	2,432,218	62,312,262	41,434,801	13,145,436	54,580,237	50
Series A-1 redeemable preferred stock	–	1,598,533	1,429,126	–	1,429,126	1,272,441	–	1,272,441	90
Total stockholders' deficit	22,533,610	23,144,214	46,123,844	2,432,218	48,556,062	23,653,090	13,145,436	36,798,526	46

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

Certain statements in this annual report on Form 10-K that are not historical in fact constitute “forward-looking statements.” Words such as, but not limited to, “believe,” “expect,” “anticipate,” “estimate,” “intend,” “plan,” and similar expressions are intended to identify forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors based on the Company’s estimates and expectations concerning future events that may cause the actual results of the Company to be materially different from historical results or from any results expressed or implied by such forward-looking statements. These risks and uncertainties, as well as the Company’s critical accounting policies, are discussed in more detail under “Management’s Discussion and Analysis—Critical Accounting Policies” and in periodic filings with the Securities and Exchange Commission. You should review carefully the factors identified in this report in Item 1A, “Risk Factors”. We disclaim any intent to update or announce revisions to any forward-looking statements to reflect actual events or developments, except as required by law. Except as otherwise indicated herein, all dates referred to in this report represent periods or dates fixed with reference to our fiscal year ended December 31.The Company undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

You should read the following discussion of our financial condition and results of operations together with the audited financial statements and the notes to the audited financial statements included in this annual report. This discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results may differ materially from those anticipated in these forward-looking statements.

Restatement

With this Annual Report on Form 10-K, we have restated the following previously filed consolidated financial statements, data, and related disclosures:

(1) Our consolidated balance sheet as of December 31, 2012, and the related consolidated statements of operations, stockholders' deficit, and cash flows for each of the fiscal years ended December 31, 2011 and 2012 located in Part II, Item 8 of this Annual Report on Form 10-K;

(2) Our selected financial data as of, and for our fiscal years ended December 31, 2009, 2010, 2011, and 2012 located in Part II, Item 6 of this Annual Report on Form 10-K;

(3) Our management's discussion and analysis of financial condition and results of operations as of and for our fiscal years ended December 31, 2011 and 2012, contained herein; and

(4) Our unaudited quarterly financial information for each quarter in our fiscal years ended December 31, 2012 and 2011, and for the quarters ended March 31, 2013, June 30, 2013, and September 30, 2013, in Note 19, "Summarized Quarterly Unaudited Financial Data (Restated)" of the Notes to Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K.

The restatement results from our review of accounting for a potentially unsettled warrant obligation and stock compensation accounting. See "Explanatory Note Regarding Restatement" immediately preceding Part I, Item 1 and Note 2, "Restatement of Previously Issued Consolidated Financial Statements" of the Notes to Consolidated Financial Statements in Part II, Item 8 for a detailed discussion of the review and effect of the restatement.

The following discussion and analysis of our financial condition and results of operations incorporates the restated amounts. For this reason, the data set forth in this section may not be comparable to discussions and data in our previously filed Annual Reports of Form 10-K.

Overview

We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging fields of regenerative medicine and stem cell therapy. Principal activities to date have included obtaining financing, securing operating facilities, and conducting research and development. We have no therapeutic products

currently available for sale and do not expect to have any therapeutic products commercially available for sale for a period of years, if at all. These factors indicate that our ability to continue research and development activities is dependent upon the ability of management to obtain additional financing as required. We are actively conducting clinical trials for treating dry age-related macular degeneration and Stargardt's macular degeneration. Our preclinical programs involve cell therapies for the treatment of other ocular disorders and for diseases outside the field of ophthalmology, including autoimmune, inflammatory and wound healing-related disorders. Our intellectual property portfolio includes pluripotent human embryonic stem cell-induced pluripotent stem cell platforms; and other cell therapy research programs.

Comparison of Years Ended December 31, 2013 and 2012

	2013	2012 As restated	Dollar Change	Percentage Change
Revenue	$224,985	$466,487	$(241,502)	(51.8)%
Cost of Revenue	82,436	117,436	(35,000)	(29.8)%
Gross Profit	142,549	349,051	(206,502)	(59.2)%
Research and Development expenses:				
-R&D expenses, excluding non-cash, stock option compensation	10,171,842	10,366,542	(194,700)	(1.9)%
- Non-cash, stock option compensation	1,392,926	3,792,394	(2,399,468)	(63.3)%
Total Research and Development	11,564,768	14,158,936	(2,594,168)	(18.3)%
General and administrative expenses				
-G&A expenses, excluding non-cash, stock option compensation	9,569,934	7,429,375	2,140,559	28.8 %
-Non-cash, stock option compensation	2,487,133	4,003,491	(1,516,358)	(37.9)%
Total General and Administrative	12,057,067	11,432,866	624,201	5.5 %
Litigation settlement contingency	6,228,621	–	6,228,621	100 %
Non-operating expense	(1,314,341)	(9,341,364)	8,027,023	85.9 %
Net Loss	$(31,022,248)	$(34,584,115)	$3,561,867	10.3 %

Revenue

Revenue relates to license fees and royalties collected that are being amortized over the period of the license granted, and are therefore typically consistent between periods. The decrease of 51.8% is related to the termination of our license agreement with International Stem Cell Corporation in early 2013. Deferred revenue of $1,907,574 as of December 31, 2013 will be amortized to revenue over approximately 12 years. We currently have no therapeutic products available for sale and do not expect to have any commercially available for sale for a period of years, if at all.

Research and Development Expenses

Research and development or, R&D expenses, consist mainly of payroll and payroll related expenses for our scientific staff, services we attain in connection with our ongoing clinical trials and pre-clinical programs, our R&D and GMP facility costs and research supplies and materials. R&D expenses, excluding non-cash, stock option compensation expense, decreased from $10,366,542 for the year ended December 31, 2012 to $10,171,842 for the year ended December 31, 2013, for a decrease of $194,700 or 1.9%. In the beginning of 2013, a number of our employees who are located in our Massachusetts R&D and manufacturing facility changed their roles and responsibilities consistent with our scale up of the general and administrative function within the company. This shift in roles and responsibilities in early 2013 resulted in a decrease in R&D payroll related expenses of approximately $1,144,000. Aside from this shift in responsibilities of these employees, and the related shift in their cost allocation, R&D increased from 2012 to 2013. The primary driver of this increased spending was our planned expansion of our clinical trial activities which increased by approximately $639,000 during the year, as we expanded our clinical sites and increased the activities to screen, enroll and treat patients in our AMD and SMD clinical trials, in the US and in the UK. Also contributing to the increase in R&D spending for the year was approximately $557,000 of increased collaboration and licensing costs incurred, in support of our pre-clinical programs and an increase of approximately $317,000 of additional occupancy costs due to the additional lab and manufacturing space rented in our Marlborough facility. Other items of increased spending were recruiting costs of approximately $94,000; and depreciation expenses of approximately $51,000.

Research and development expenses related to non-cash, stock option compensation was $1,392,926 for the year ended December 31, 2013 and $3,792,394, as restated, for the year ended December 31, 2012. This decrease of $2,399,468, or 63.3%, is due to the revaluation of stock option expense, pursuant to the adjustment of the stock option pool from liability to equity classification.

Our R&D expenses are primarily associated with basic and pre-clinical research and our clinical development programs, exclusively in the field of human stem cell therapies and regenerative medicine. Our focus is on development of our technologies in cellular reprogramming, reduced complexity applications, and stem cell differentiation. These expenses represent both pre-clinical and clinical development costs and costs associated with support activities such as quality control and regulatory processes. The cost of our research and development

personnel is the most significant category of R&D expense; however, we also incur expenses with third parties, including license agreements, sponsored research programs and consulting expenses.

We do not segregate R&D costs by project because our research is focused exclusively on human stem cell therapies as a unitary field of study. Although we have three principal areas of focus for our research, these areas are intertwined and have not yet matured to the point where they are separate and distinct projects. The intellectual property, scientists and other resources dedicated to these efforts are not separately allocated to individual projects, since the research is conducted on an integrated basis.

We expect R&D expenses will increase in 2014 and beyond as we continue to invest in our clinical and pre-clinical programs. The rate of increase for any given period will be impacted by the timing of enrollment, and treatment of clinical trial patients along with interim results of our many pre-clinical programs. The amount and timing of these fluctuations can be difficult to predict due to the uncertainty inherent in the timing and extent of progress in our research programs, initiation of new clinical trials and rate of progression of existing clinical trials. In addition, the results from our basic research and pre-clinical trials, as well as the results of trials of similar therapeutics under development by others, will influence the number, size and duration of current and future trials. As our research efforts mature, we will continue to review the direction of our research based on an assessment of the value of possible commercial applications emerging from these efforts. Based on this continuing review, we expect to establish discrete research programs and evaluate the cost and potential for cash inflows from commercializing products, partnering with others in the biotechnology or pharmaceutical industry, or licensing the technologies associated with these programs to third parties.

We believe that it is not possible at this stage to provide a meaningful estimate of the total cost to complete our ongoing projects and bring any proposed products to market. The use of human embryonic stem cells as a therapy is an emerging area of medicine, and it is not known what clinical trials will be required by the FDA in order to gain marketing approval. Costs to complete could vary substantially depending upon the projects selected for development, the number of clinical trials required and the number of patients needed for each study. It is possible that the completion of these studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm our results of operations. Due to these uncertainties, we cannot reasonably estimate the size, nature nor timing of the costs to complete, or the amount or timing of the net cash inflows from our current activities. Until we obtain further relevant pre-clinical and clinical data, we will not be able to estimate our future expenses related to these programs or when, if ever, and to what extent we will receive cash inflows from resulting products.

General and Administrative Expenses

General and Administrative, or G&A costs, consist mainly of payroll and payroll related expenses, legal costs relating to corporate matters and litigation, and fees for consultants, service providers and other administrative costs. G&A expenses, excluding non-cash, stock option compensation increased from $7,429,374 for the year ended December 31, 2012, to $9,569,934 for the year ended December 31, 2013, for an increase of $2,140,559 or 28.8%. The increase in G&A spending primarily related to increases in salaries and wages of approximately $1,347,000. In the beginning of 2013, a number of our employees who are located in our Massachusetts R&D and manufacturing facility changed their roles and responsibilities consistent with our scale up of the general and administrative function within the company. This further emphasis on the G&A function is consistent with our plans to ultimately uplist our stock to a national exchange, and also to relocate the majority of our G&A function to our Massachusetts facility. We also realized an increase in legal expenses of approximately $1,235,000 in 2013, as compared to 2012. These increases were partially offset by a reduction in the amounts incurred for outside services and professional fees of approximately $162,000.

General and administrative expenses related to non-cash, stock option compensation was $2,487,133 for the year ended December 31, 2013, and $4,003,491, as restated, for the year ended December 31, 2012, for a decrease of $1,516,358 or 37.9%. This decrease is due to the revaluation of stock option expense, pursuant to the adjustment of the stock option pool from liability to equity classification.

We expect G&A expenses to remain relatively flat for the foreseeable future. Factors that could change this expectation are unexpected costs from additional or prolonged non-routine legal matters.

Other Income (Expense)

Other, non-operating income (expense) consisted of the following:

	2013	2012	$ Change	% Change
		As restated		
Interest income	$165,918	$15,581	$150,337	964.9 %
Interest expense	(1,437,584)	(1,104,602)	(332,982)	(30.1)%
Finance gain (loss)	95,162	(7,015,470)	7,110,632	101.4 %
Adjustments to fair value of unsettled warrant obligation (expense)	(107,438)	1,390,382	(1,497,820)	(107.7)%
Loss on disposal of fixed assets	–	(17,138)	17,138	100 %
Gain on the extinguishment of debt	438,587	–	438,587	100 %
Fines and penalties	(962,227)	(3,500,000)	2,537,773	72.5 %
Adjustments to fair value of derivatives	493,241	889,883	(396,642)	(44.6)%
Total non-operating expense	$(1,314,341)	$(9,341,364)	$8,027,023	85.9 %

Interest expense for the year ended December 31, 2013 compared to the year ended December 31, 2012 increased by $332,982, or 30.1%. The increase is due to interest on the CAMOFI notes which were effective in December 2012 as part of a settlement agreement. The principal amount of the CAMOFI debentures at issuance was $6,000,000 and the debentures accrue interest at a rate of 8%. This interest expense increase was partially offset by the discontinuation of interest from the JMJ Financial and Volation debt. Convertible promissory notes originally issued to JMJ Financial in 2010 were retired in May 2013, when the Company entered into a Mutual Release and Waiver Agreement with JMJ Financial. In 2009, the Company entered into a purchase agreement with Volation and issued Series A-1 redeemable convertible preferred stock which paid dividends at a rate of 10% and was recorded as interest expense. In April 2013, the Company entered into an exchange agreement whereby the Series A-1 preferred stock was exchanged for shares of common stock of the Company.

Finance gain (loss) for the year ended December 31, 2013, changed by $7,110,632, from a loss of $7,015,470 in 2012 to a gain of $95,162 in 2013. The finance charges for the year ended December 31, 2012 consist of $3,586,000 related to the final settlement with Alpha Capital concerning a dispute over convertible notes and warrants they held plus an additional $2,887,000 related to the final settlement with CAMOFI and an increase in the estimate of various additional potential settlement claims of $542,470.

Adjustments to fair value of unsettled warrant obligation for the year ended December 31, 2013 was a loss of $107,438 compared to a gain of $1,390,382 for the year ended December 31, 2012. The fair value account adjusts the 63.2 million shares which are contractually obligated by the change in the stock price for each period. In 2013 the stock price was relatively flat and on average increased slightly, leading to expense for the year. In 2012 the stock price dropped from approximately $0.09 to $0.06, leading to a gain for the year.

The gain on the extinguishment of debt for the year ended December 31, 2013 relates to the settlement with JMJ Financial.

Fines and penalties for the year ended December 31, 2013 were $962,227. Approximately $587,000 of the balance was due to us being named as a defendant in a civil action brought by the SEC, alleging that we violated the Securities Act because certain sales of shares to outside organizations completed in 2008 and 2009 were neither registered under the Securities act nor subject to an exemption from registration. This amount was in addition to the $3,500,000 we expensed in 2012. The SEC civil suit was settled in December 2013, for approximately $4,087,000, which includes the $3,500,000 and approximately $587,000 of pre-judgment interest. The remaining balance in 2013 of approximately $375,000 relates to an SEC investigation of our previous CEO’s failure to report transactions for shares of common stock sold between February 7, 2011 and January 10, 2013. The amount charged is based on discussions with SEC in resolving the issue from a Company perspective.

The adjustment to fair value of derivatives changed to a gain of $493,241 during the year ended December 31, 2013, from a gain of $889,883 during the year ended December 31, 2012. The decrease in gain of $396,642 is due to the

revaluation of the embedded derivative related to the CAMOFI debentures and lower expected volatility relating to the decreased time to maturity offset by a slightly higher stock price at December 31, 2013, $0.0617, than at December 31, 2012, $0.0557.

Comparison of Years Ended December 31, 2012 and 2011

	2012 As restated	2011 As restated	Dollar Change	Percentage Change
Revenue	$466,487	$506,419	$(39,932)	(7.9)%
Cost of Revenue	117,436	343,950	(226,514)	(65.9)%
Gross Profit	349,051	162,469	186,582	114.8 %
Research and Development expenses:				
-R&D expenses, excluding non-cash, stock option compensation	10,366,542	9,953,224	413,318	4.2 %
- Non-cash, stock option compensation	3,792,394	(199,465)	3,991,859	2001.3 %
Total Research and Development	14,158,936	9,753,759	4,405,177	45.2 %
General and administrative expenses:				
-G&A expenses, excluding non-cash, stock option compensation	7,429,375	7,168,957	260,418	3.6 %
- Non-cash, stock option compensation	4,003,491	266,752	3,736,739	1400.8 %
Total General and Administrative	11,432,866	7,435,709	3,997,157	53.8 %
Loss on settlement of litigation	–	294,144	294,144	100 %
Non-operating expense	(9,341,364)	(37,871,660)	28,530,296	75.3 %
Net Loss	$(34,584,115)	$(55,192,803)	$20,608,688	37.3 %

Revenue

Revenue relates to license fees and royalties collected that are being amortized over the period of the license granted, and are therefore typically consistent between periods. Revenue was $466,487 for the year ended December 31, 2012, which was a decrease of $39,932 or 7.9% compared to the year ended December 31, 2011. The decrease is due to license agreements that were terminated in 2011.

Research and Development Expenses

Our R&D expenses consist mainly of payroll and payroll related expenses for our scientific staff, services we attain in connection with our ongoing clinical trials and pre-clinical programs, our R&D and GMP facility costs and research supplies and materials. R&D expenditures, excluding non-cash, stock option compensation expense, for the year ended December 31, 2012 increased from $9,953,224 in 2011 to $10,366,542 in 2012 for an increase of $413,318 or 4.2%. The increase in R&D expenditures during 2012 as compared to 2011 was primarily due to an increase in clinical trial expenses of approximately $1,367,000, R&D lab supplies of approximately $522,000 and legal costs related to intellectual property of approximately $485,000, offset by a decrease in salaries and wage related costs of approximately $1,365,000 and consultant fees of approximately $302,000. Grants, which offset research and development expense, also increased by approximately $251,000 in 2012 as compared to 2011.

Research and development expenses related to non-cash, stock option compensation expense, as restated, was $3,792,394 for the year ended December 31, 2012 and $(199,465), as restated, for the year ended December 31, 2011. This increase of $3,991,859 is due to the revaluation, pursuant to the adjustment of the stock option pool from liability to equity classification.

Our R&D expenses are primarily associated with basic and pre-clinical research and our clinical development programs, exclusively in the field of human stem cell therapies and regenerative medicine. Our focus is on development of our technologies in cellular reprogramming, reduced complexity applications, and stem cell differentiation. These expenses represent both pre-clinical and clinical development costs and costs associated with support activities such as quality control and regulatory processes. The cost of our research and development personnel is the most significant category of R&D expense; however, we also incur expenses with third parties, including license agreements, sponsored research programs and consulting expenses.

We do not segregate R&D costs by project because our research is focused exclusively on human stem cell therapies as a unitary field of study. Although we have three principal areas of focus for our research, these areas are intertwined and have not yet matured to the point where they are separate and distinct projects. The intellectual property, scientists and other resources dedicated to these efforts are not separately allocated to individual projects,

since the research is conducted on an integrated basis.

We expect R&D expenses to increase modestly for the foreseeable future. The rate of increase for any given period will be impacted by the timing of enrollment, and treatment of clinical trial patients along with interim results of our many pre-clinical programs. The amount and timing of these fluctuations can be difficult to predict due to the uncertainty inherent in the timing and extent of progress in our research programs, initiation of new clinical trials and rate of progression of existing clinical trials. In addition, the results from our basic research and pre-clinical trials, as well as the results of trials of similar therapeutics under development by others, will influence the number, size and duration of current and future trials. As our research efforts mature, we will continue to review the direction of our research based on an assessment of the value of possible commercial applications emerging from these efforts. Based on this continuing review, we expect to establish discrete research programs and evaluate the cost and potential for cash inflows from commercializing products, partnering with others in the biotechnology or pharmaceutical industry, or licensing the technologies associated with these programs to third parties.

We believe that it is not possible at this stage to provide a meaningful estimate of the total cost to complete our ongoing projects and bring any proposed products to market. The use of human embryonic stem cells as a therapy is an emerging area of medicine, and it is not known what clinical trials will be required by the FDA in order to gain marketing approval. Costs to complete could vary substantially depending upon the projects selected for development, the number of clinical trials required and the number of patients needed for each study. It is possible that the completion of these studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm our results of operations. Due to these uncertainties, we cannot reasonably estimate the size, nature nor timing of the costs to complete, or the amount or timing of the net cash inflows from our current activities. Until we obtain further relevant pre-clinical and clinical data, we will not be able to estimate our future expenses related to these programs or when, if ever, and to what extent we will receive cash inflows from resulting products.

General and Administrative Expenses

Our G&A costs consist mainly of payroll and payroll related expenses for employees, legal costs relating to corporate matters and litigation, and fees for consultants, service providers and other administrative costs. G&A expenses, excluding non-cash, stock option compensation expense, for the year ended December 31, 2012 compared to the year ended December 31, 2011 increased from $7,168,957 in 2011 to $7,429,375 in 2012 for an increase of $260,418, or 3.6%. This increase was primarily a result of an increase in corporate legal fees of approximately $745,000, salary and wage related costs of approximately $690,000 and travel expenses of $91,000, offset by a decrease in consultant expenses, including public relations and investor relations consultants, of approximately $1,341,000.

General and administrative expenses related to non-cash stock option compensation expense was $4,003,491, as restated, for the year ended December 31, 2012 and $266,752, as restated, for the year ended December 31, 2011. This increase of $3,736,739 is due to the revaluation, pursuant to the adjustment of the stock option pool from liability to equity classification.

Other Income (Expense)

Other income (expense) consisted of the following:

	2012	2011	$ Change	% Change
	As restated	As restated		
Interest income	$15,581	$35,114	$(19,533)	(55.6)%
Interest expense and late fees	(1,104,602)	(1,510,693)	406,091	26.9 %
Finance loss	(7,015,470)	(54,984,170)	47,968,700	87.2 %
Adjustments to fair value of unsettled warrant obligation	1,390,382	7,963,101	(6,572,719)	(82.5)%
Loss on disposal of fixed assets	(17,138)	–	(17,138)	(100)%
Loss attributable to equity method investment	–	(820,000)	820,000	100 %
Fines and penalties	(3,500,000)	–	(3,500,000)	(100)%
Adjustments to fair value of derivatives	889,883	11,444,988	(10,555,105)	(92.2)%
Total non-operating expense	$(9,341,364)	$(37,871,660)	$28,530,296	75.3 %

Interest expense for the year ended December 31, 2012 compared to the year ended December 31, 2011 decreased by $406,091 to $1,104,602 in 2012 as compared to $1,510,693 in 2011. The decrease is due to a decrease in amortization of debt discounts for the year ended 2012 of $406,091.

The decrease in finance loss of $47,968,700 from the year ended December 31, 2012, compared to that of 2011, relates primarily to settlements. During the year ended December 31, 2011, we incurred approximately $52,095,000 in financing costs due to settlements and pending litigation with Midsummer Investments, Alpha Capital, Black Mountain Equities, Cranshire Capital, CAMOFI, and Global Settlement investors, resulting from ratchet down provisions in their respective warrant agreements. The Global Settlement investors refers to a group of 40 holders of convertible promissory notes and warrants between 2005 and 2010 who settled with the Company on claims that the warrants they held should have been adjusted due to the investment the Company entered into with JMJ Financial in 2010. The finance charges for the year ended December 31, 2012 consist of $3,586,000 related to the final settlement with Alpha Capital plus approximately an additional $2,887,000 related to the final settlement with CAMOFI and an increase in the estimate of various additional potential settlement claims of approximately $542,470.

Adjustments to fair value of unsettled warrant obligation for the year ended December 31, 2012, compared to that of the year ended December 31, 2011 decreased by $6,572,719 or 82.5%. The unsettled warrant obligation had approximately 63.2 million shares valued at an average stock price of approximately $0.15 in 2011 compared to an average stock price of approximately $0.07 in 2012.

Fines and penalties increased by $3,500,000 for the year ended December 31, 2012 compared to December 31, 2011 due to us being named as a defendant in a civil action brought by the SEC alleging that the we violated the Securities Act because certain sales of shares to outside organizations completed in 2008 and 2009 were neither registered under the Securities Act nor subject to an exemption from registration.

Adjustment to fair value of derivatives decreased from a gain of $11,444,988 during the year ended December 31, 2011, to a gain of $889,883 during the year ended December 31, 2012. The decrease of $10,555,105 is primarily because during the year ended December 31, 2011 the number of warrants was reduced from 134,931,000 warrants outstanding at December 31, 2010 to approximately 21,757,000 at December 31, 2011 along with a decrease in our share price from $0.08 at December 31, 2011 to $0.06 at December 31, 2012 which resulted in a decrease in derivative fair value of approximately $890,000. However during the year ended December 31, 2012, the number of warrants outstanding did not change from the outstanding amount at December 31, 2011.

Liquidity and Capital Resources

Cash Flows

The following table sets forth a summary of our cash flows for the periods indicated below:

	Year Ended December 31,		
	2013	2012	2011
Net cash used in operating activities	$(21,965,199)	$(14,606,357)	$(13,627,287)
Net cash used in investing activities	(710,772)	(111,350)	(36,830)
Net cash provided by financing activities	17,177,604	8,856,552	10,877,715
Net increase (decrease) in cash and cash equivalents	(5,498,367)	(5,861,155)	(2,786,402)
Cash and cash equivalents at the end of the period	$1,743,485	$7,241,852	$13,103,007

Operating Activities

Our net cash used in operating activities during the years ended December 31, 2013, 2012 and 2011 was $21,965,199, $14,606,357, and $13,627,287, respectively. Net Cash used in operating activities in 2013 increased over the 2012 comparable amount by $7,358,842. During the year ended December 31, 2013 the change in operating assets and liabilities resulted in a $2,965,349 use of cash, driven by a reduction in accounts payable and accrued liabilities and an increase to prepaid and other current assets. This compared to a net source of cash of $4,738,323 from the change in operating assets and liabilities for the year ended December 31, 2012, resulting in a net difference from 2012 to 2013 of $7,703,672.

Cash Used in Investing Activities

Cash used in investing activities during the years ended December 31, 2013, 2012 and 2011 was $710,772, $111,350 and $36,830, respectively. Our cash used in investing activities increased during the year ended December 31, 2013 over the comparable amount from December 31, 2012 mainly due to the purchase of fixed assets for approximately $671,827. The majority of the fixed asset purchases related to leasehold improvements for additional leased space in Marlborough, MA in 2013. Our purchases for this build-out of additional space are substantially complete as of the end of 2013 so our investing levels relating to the purchase of fixed assets are likely to show a reduction in 2014.

Cash Flows from Financing Activities

Cash flows provided by financing activities during the years ended December 31, 2013, 2012 and 2011 was $17,177,604, $8,856,552, and $10,877,715, respectively. On September 19, 2012, we entered into a purchase agreement with Lincoln Park Capital Fund, LLC, or Lincoln Park. Pursuant to the purchase agreement, we have the right to sell to Lincoln Park up to $35,000,000 in shares of our common stock. Upon signing the purchase agreement, Lincoln Park purchased 10,000,000 shares of our common stock for $800,000 as the initial purchase. In addition, we issued 8,750,000 shares of common stock to Lincoln Park as a commitment fee.

Upon the satisfaction of the conditions set forth in the purchase agreement, including the registration statement for the resale of the shares issued thereunder being declared effective by the SEC (which effectiveness occurred on November 6, 2012), we have the right over a 36-month period to sell up to an additional $34.2 million worth of shares of our common stock to Lincoln Park, upon the terms set forth in the purchase agreement. The purchase price of such common stock will be based on the prevailing market price of our common stock immediately preceding the time of sales, with us having the ability to control the timing and amount of any future sales, if any, of common stock to Lincoln Park. There are no upper limits to the price Lincoln Park may pay to purchase our common stock. Lincoln Park shall not have the right or the obligation to purchase any shares of common stock on any business day that the closing price of our common stock is below a floor price as provided in the purchase agreement. The purchase price means, with respect to any regular purchase, the lower of: (i) the lowest sale price on the applicable purchase date and (ii) the arithmetic average of the three (3) lowest closing sale prices for the common stock during the ten (10) consecutive business days ending on the business day immediately preceding such purchase date, in each case, to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction that occurs on or after the date of this purchase agreement. However, the purchase price cannot be below $0.03.

During the year ended December 31, 2013, we received $17,777,604 from the issuance of 253,260,000 shares to Lincoln Park under the purchase agreement. This was offset by a payment of $600,000 for the CAMOFI Senior Secured Convertible Debentures. For the year ended December 31, 2013, we satisfied our obligation to CAMOFI and CAMZHN with one cash payment of $600,000, and two payments of $600,000 in conversions to common shares at the holders' election and one payment satisfying the $600,000 obligation in conversions to common shares at our election on the senior secured convertible debentures. We expect to continue to use the financing arrangement with Lincoln Park during 2014. As of December 31, 2013, we had $14,281,294 million remaining available under the Lincoln Park facility. We plan on settling the remaining principal payments to CAMOFI through the issuance of common stock, to the extent allowable under the settlement agreement.

We plan to fund our operations for the foreseeable future from the following sources:

- As of December 31, 2013, we have approximately $1,743,485 in cash.

- As of December 31, 2013, $14,281,294 is available to us through the Lincoln Park financing arrangement.

- We continue to repay our debt obligations through the issuance of shares of our common stock, enabling us to use our cash resources to fund our operations.

We believe that our current cash balance, and the $14,281,294 million available to us under the Lincoln Park financing arrangement, will be sufficient to fund our operations into the second half of 2014. This belief is based on the assumption that our stock price does not realize any significant or prolonged decreases. Our ability to fund our operations through the Lincoln Park arrangement is highly dependent on our stock price. A significant decline in our share price could force us to curtail our operations in part, or entirely. We are continually in discussions with potential investors and collaborators to explore alternative sources of dilutive and non-dilutive funding, so that we may either extend our ability to fund operations through 2014, and beyond. In addition to exploring new sources of funding we have established contingency budget plans where we can scale back programs and costs to extend our company operations and increase the time to secure proper financing throughout 2014.

On a long term basis, we have no expectation of generating any meaningful revenues from our product candidates for a substantial period of time and will rely on raising funds in capital transactions to finance our research and development programs. Our future cash requirements will depend on many factors, including the pace and scope of our research and development programs, the costs involved in filing, prosecuting and enforcing patents, and other costs associated with commercializing our potential products. We intend to seek additional funding primarily through public or private financing transactions, and, to a lesser degree, new licensing or scientific collaborations, grants from governmental or other institutions, and other related transactions. If we are unable to raise additional funds, we will be forced to either scale back our business efforts or curtail our business activities entirely. We cannot assure you that public or private financing or grants will be available on acceptable terms, if at all. Several factors will affect our ability to raise additional funding, including, but not limited to, the volatility of our common stock.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based upon consolidated financial statements and condensed consolidated financial statements that we have prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make a number of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses in the condensed consolidated financial statements and accompanying notes included in this report. We base our estimates on historical information, when available, and assumptions believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following accounting policies to be critical to the estimates used in the preparation of our financial statements.

Use of Estimates — These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Specifically, management has estimated loss contingencies related to outstanding litigation. In addition, management has estimated variables used to calculate the Black-Scholes option pricing model used to value derivative instruments as discussed below under "Fair Value Measurements". Also, management has estimated the expected economic life and value of the our licensed technology, our net operating loss for tax purposes, share-based payments for compensation to employees, directors, consultants and investment banks, and the useful lives of the our fixed assets. Actual results could differ from those estimates.

Deferred Issuance Cost—Payments, either in cash or share-based payments, made in connection with the sale of debentures are recorded as deferred debt issuance costs and amortized using the effective interest method over the lives of the related debentures.

Fair Value Measurements—For certain financial instruments, including, accounts payable, accrued expenses, interest payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

On January 1, 2008, we adopted FASB ASC 820-10, "*Fair Value Measurements and Disclosures*." FASB ASC 820-10 defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

· Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.

· Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

· Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

Management analyzes all financial instruments with features of both liabilities and equity under ASC 480, "*Distinguishing Liabilities From Equity*" and ASC 815, "*Derivatives and Hedging*." Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as adjustments to fair value of derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

Revenue Recognition—Our revenue is generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

Stock Based Compensation—We record stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation." ASC 718 requires companies to measure compensation cost for stock-based employee compensation at fair value at the grant date and recognize the expense over the employee's requisite service period. We recognize in the statement of operations the grant-date fair value of stock options and other equity-based compensation issued to employees and non-employees.

Contractual Obligations

Our significant contractual obligations, including the Marlborough lease entered into on January 11, 2013, are as follows:

	Less than One Year	One to Three Years	Three to Five Years	More Than Five Years	Total
Operating lease obligations	$513,820	$798,105	$467,586	$ –	$1,779,511
Other Liability - SEC settlement	2,724,619	1,362,000	–	–	4,086,619
Senior secured convertible promissory notes(1)	2,400,000	1,200,000	–	–	3,600,000
Total	$5,638,439	$3,360,105	$467,586	$ –	$9,466,130

(1) The Company has the option, subject to the satisfaction of certain conditions, to make payment on these notes in shares of Company Common Stock.

Off-Balance Sheet Arrangements

We do not maintain any off-balance sheet arrangements, transactions, obligations or other relationships with unconsolidated entities that would be expected to have a material current or future effect upon our financial condition or results of operations.

Shelf Registration Statement

On May 22, 2013, we filed with the SEC a universal shelf registration statement on Form S-3 (Registration No. 333-188777), which provides for the offer, from time to time, of an indeterminate amount (up to $35,000,000) of: common stock; preferred stock; debt securities; warrants to purchase any of these securities; and any combination of these securities, individually or as units. In addition, if we identify any security holder(s) in a prospectus supplement, they may also offer identified securities under this registration statement although we will not receive any of the proceeds from the sale of securities by any of these selling security holders. This universal shelf registration statement was declared effective by the SEC on June 5, 2013. The addition of any newly issued equity securities into the market may be dilutive to existing stockholders and new issuances by us or sales by our selling security holders could have an adverse effect on the price of our securities.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Our exposure to market risk is limited primarily to interest income sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because a significant portion of our investments are in short-term debt securities issued by the U.S. government and institutional money market funds. The primary objective of our investment activities is to preserve principal. Due to the nature of our marketable securities, we believe that we are not exposed to any material market risk. We do not have any derivative financial instruments or foreign currency instruments. If interest rates had varied by 10% in the year ended December 31, 2013, it would not have had a material effect on our results of operations or cash flows for that period.

Item 8. Financial Statements and Supplementary Data.

The information required by this item is set forth beginning on page F-1 of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures.

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934 are (1) recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (2) accumulated and communicated to our management, to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Our management, including our Interim President, Chief Financial Officer and Executive Vice President of Corporate Development (Principal Executive Officer and Principal Financial Officer), evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934 and have concluded based upon the evaluation described above that, as of the December 31, 2013, our financial disclosure controls and procedures were not effective due to the material weakness in our internal control over financial reporting as described below.

Management's Report on Internal Control Over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for our company. Internal control over financial reporting is defined in Exchange Act Rules 13a-15(f) and 15(d) -15(f) as a process designed by, or under the supervision of, our Chief Executive and Chief Financial Officer and effected by our board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and disposition of our assets;

- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles;

- provide reasonable assurance that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and

- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

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

Our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2013 and identified a material weakness in internal control over financial reporting as of that date. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statement will not be prevented or detected on a timely basis. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), in Internal Control-Integrated Framework. Because of the material weakness described below, management concluded that, as of December 31, 2013, our internal control over financial reporting was not effective.

Based upon management's evaluation, we concluded that we did not maintain adequate and effective internal control in the area of technical accounting relating to the application of applicable accounting literature related to accounting for derivatives. Specifically, the control deficiency related to our interpretation of the accounting for an embedded derivative instrument with an anti-dilution ratchet provision and the subsequent unsettled share obligation. It was discovered during the preparation of our year-end financial statements for fiscal year 2013 that certain prior technical accounting judgments and conclusions related to the recording of the embedded derivative liability were not supportable, leading management to conclude that the execution of certain internal control activities had not been adequate. Specifically, we believe that, in the context of the small size of our business, we did not have sufficient staffing and technical expertise in this area of technical accounting to provide adequate review and control with respect to accounting for certain types of embedded derivatives. The material weakness contributed to the restatement of prior period financial statements, which have been reflected in the financial statements for the three years ended December 31, 2013.

SingerLewak LLP, our independent registered public accounting firm, has audited our consolidated financial statements and the effectiveness of our internal control over financial reporting as of December 31, 2013. This report appears below.

Changes in Internal Controls Over Financial Reporting.

Other than as described below, there was no change in our internal control over financial reporting during the fourth quarter of 2013 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Remediation of Material Weakness — Technical Accounting Related to Derivative Accounting

On March 10, 2014, we announced that we had conducted an internal accounting policy review related to our accounting of derivatives, specifically embedded derivatives relating to anti-dilution ratchet provisions. Under the direction of the Audit Committee, we commenced a process to review our processes for accounting for derivatives. See the "Explanatory Note Regarding Restatement" immediately preceding Part I, Item 1, and Note 2 of the Notes to Consolidated Financial Statements in Part II, Item 8.

In connection with such review, we identified a control deficiency relating to the application of applicable accounting literature related to accounting for derivatives. Specifically, the control deficiency related to our interpretation of the FASB Accounting Standards Codification for derivatives (ASC 815) in determining the proper accounting treatment for an embedded derivative with anti-dilution ratchet provisions. The warrant agreement was entered into in 2005 and the applicable ratchet provision extended through January 2009. The resulting unissued share obligation remained an

issue through Q3 2013.

Management, with the input, oversight, and support of the Audit Committee has identified and taken the following steps, which management believes have corrected the material weakness described above subsequent to December 31, 2013:

- in June 2013, we hired a new Chief Financial Officer, who has extensive experience leading the accounting and finance functions at publicly traded companies and adds accounting expertise to our staff. For several years we had outsourced many accounting duties and the previous CEO acted as the company CFO as well;

- in November 2013, we hired a new Corporate Controller, who has extensive experience leading the accounting and finance functions at publicly traded companies and adds accounting expertise to our staff; and

- in December 2013, we engaged external advisors knowledgeable in many technical accounting matters, including derivatives to assist us in the interpretation of key technical accounting standards and associated interpretations and the determination of how to adequately apply such standards;

Additionally, we plan to enhance our training programs to ensure that our accounting personnel have the competence and the on-going accounting and financial reporting training necessary for their assigned duties, including specific technical training courses related to derivative accounting and other complex accounting issues.

There were no changes in our internal control over financial reporting that occurred during the fourth quarter of 2013 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders

Advanced Cell Technology, Inc. and subsidiary

We have audited Advanced Cell Technology, Inc. and subsidiary's (collectively, the “Company”) internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Advanced Cell Technology, Inc. and subsidiary's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

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

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

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

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management's assessment.

In connection with the restatement of the consolidated financial statements for the fiscal years ended December 31, 2009, 2010, 2011, and 2012, for each quarter in the fiscal years ended December 31, 2011 and December 31, 2012, and for the first three quarters of the fiscal year ended December 31, 2013, we determined that the Company has a material weakness as of December 31, 2013, namely that its controls over the evaluation and review of complex and non-routine transactions were not effective.

Specifically, the Company did not maintain adequate and effective internal control in the area of technical accounting relating to the application of applicable accounting literature related to accounting for derivatives. The material weakness relates to the Company’s interpretation of the accounting for an embedded derivative instrument with an anti-dilution ratchet provision and the subsequent unsettled share obligation.

This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2013 financial statements, and this report does not affect our report dated April 1, 2014 on those consolidated financial statements.

In our opinion, because of the effect of the material weakness described above on the achievement of the objectives of the control criteria, Advanced Cell Technology, Inc. and subsidiary's has not maintained effective internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Advanced Cell Technology, Inc. and subsidiary as of December 31, 2013 and 2012, and the related consolidated statements of operations, stockholders' deficit, and cash flows for each of the three years in the period ended December 31, 2013, and our report dated April 1, 2014 expressed an unqualified opinion and included an emphasis paragraph relating to an uncertainty as to the Company’s ability to continue as a going concern.

/s/ SingerLewak LLP
Los Angeles, California
April 1, 2014

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than 120 days after the close of our year ended December 31, 2013.

Code of Ethics

Our Board of Directors has adopted a code of business conduct and ethics that applies to our directors, officers and employees. There have been no material modifications to, or waivers from, the provisions of such code. This code is available on the corporate governance section of our website (which is a subsection of the investor relations section of our website) at the following address: www.advancedcell.com. Any waivers from or amendments to the code will be filed with the SEC on Form 8-K. You may also request a printed copy of the code, without charge, by writing to us at Corporate Secretary, Advanced Cell Technology, Inc., 33 Locke Drive, Marlborough, Massachusetts.

Item 11. Executive Compensation

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than 120 days after the close of our year ended December 31, 2013.

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

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than 120 days after the close of our year ended December 31, 2013.

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

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than 120 days after the close of our year ended December 31, 2013.

Item 14. Principal Accountant Fees and Services

The information required under this item is incorporated herein by reference to our definitive proxy statement pursuant to Regulation 14A, to be filed with the SEC not later than 120 days after the close of our year ended December 31, 2013.

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

The following is a list of the Financial Statements included in Item 8 of Part II of this Report.

(a)(2) Financial Statement Schedules

Schedules not included herein are omitted because they are inapplicable or not required or because the required information is given in the financial statements and notes thereto.

(b)

The exhibits required by this item and included in this report or incorporated herein by reference are as follows:

Exhibit No.	Document Description	Incorporation by Reference
3.1	Certificate of Incorporation of the Registrant dated November 17, 2005	Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 and incorporated by reference herein.
3.2	Certificate of Amendment to Certificate of Incorporation dated October 13, 2006	Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on October 13, 2006 and incorporated by reference herein.
3.3	Certificate of the Powers, Designations, Preferences and Rights of the Series A-1 Convertible Preferred Stock dated March 5, 2009	Previously filed as Exhibit 4.1 to the Registrant’s Quarterly Report on Form 10-Q filed on July 20, 2009 and incorporated by reference herein.
3.4	Certificate of Amendment to Certificate of Incorporation dated September 15, 2009	Previously filed as Exhibit 3.15 to Registrant’s Registration Statement on Form S-1 filed November 18, 2009 and herein incorporated by reference.
3.5	Certificate of Designations of Preferences, Rights and Limitations of Series B Preferred Stock dated November 3, 2009	Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 13, 2009 and incorporated by reference herein.
3.6	Certificate of Designations of Preferences, Rights and Limitations of Series C Preferred Stock dated December 30, 2010	Previously filed as Exhibit 3.1 to the Registrant’s Current Report on Form 8-K filed on January 3, 2011 and incorporated herein by reference.
3.7	Certificate of Amendment to Certificate of Incorporation dated January 24, 2012	Previously filed as Exhibit 3.1 to the Registrant’s Current Report on Form 8-K filed on January 30, 2012 and incorporated herein by reference.
3.8		

	Certificate of Amendment to Certificate of Incorporation dated October 24, 2013.	Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on October 24, 2013 and incorporated herein by reference.
3.9	Bylaws of the Registrant	Previously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 and incorporated by reference herein.
3.9	Amendment No. 1 to Bylaws of the Registrant	Previously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on November 30, 2007 and incorporated by reference herein
4.1	Form of Subscription Agreement to Purchase Series A Convertible Preferred Stock of the Registrant	Previously filed as Exhibit 4.8 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 and incorporated by reference herein.
10.1	Advanced Cell Technology, Inc. 2004 Stock Option Plan*	Previously filed as Exhibit 10.33 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 and incorporated by reference herein.

10.2	Advanced Cell Technology, Inc. 2004 Stock Option Plan II*	Previously filed as Exhibit 10.34 to the Registrant's Quarterly Report on Form 10- QSB filed on May 23, 2005 and incorporated by reference herein.
10.3	A.C.T. Holdings, Inc. 2005 Stock Option Plan*	Previously filed as Appendix A to the Registrant's preliminary proxy statement on Form PRE-14A filed on May 10, 2005 and incorporated by reference herein.
10.4	Form of Incentive Stock Option Agreement*	Previously filed as Exhibit 10.36 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 and incorporated by reference herein.
10.5	Form of Nonqualified Stock Option Agreement*	Previously filed as Exhibit 10.37 to the Registrant's Quarterly Report on Form 10- QSB filed on May 23, 2005 and incorporated by reference herein.
10.6	Confidentiality and Nondisclosure Agreement dated February 3, 1999 by and between the Registrant and Robert Lanza, M.D.*	Previously filed as Exhibit 10.54 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 and incorporated by reference herein.
10.7	Agreement dated September 15, 2005 by and among ACT, Advanced Cell, Inc. and A.C.T. Group, Inc.	Previously filed as Exhibit 10.9 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 and incorporated by reference herein.
10.8	Agreement and Plan of Merger dated July 31, 2007 by and among the Registrant, ACT Acquisition Sub, Inc., Mytogen, Inc. and certain shareholders of Mytogen, Inc.	Previously filed as exhibit 10.101 to the Amendment No. 1 to the Registrant’s 10-KSB for the year ended December 31, 2007 filed with the SEC on June 30, 2008 and incorporated by reference herein.
10.9	Convertible Promissory Note A dated February 15, 2008 issued by the Registrant to JMJ Financial	Previously filed as Exhibit 10.9 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference.
10.10	Convertible Promissory Note B dated February 15, 2008 issued by the Registrant to JMJ Financial, and Amendment to Convertible Promissory Note B dated March 17, 2008	Previously filed as Exhibit 10.10 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference.
10.11	Secured & Collateralized Promissory Note dated February 15, 2008 issued by JMJ Financial to the Registrant	Previously filed as Exhibit 10.11 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference.
10.12	Collateral & Security Agreement dated February 15, 2008 by and between the Registrant and JMJ Financial	Previously filed as Exhibit 10.12 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference.
10.13	Preferred Stock Purchase Agreement dated November 2, 2009 between the Registrant, and	Previously filed as Exhibit 10.127 to the Registrant’s Registration Statement on Form S-1 filed on November

	Optimus Capital Partners, LLC, dba Optimus Life Sciences Capital Partners, LLC	19, 2009 and incorporated herein by reference.
10.14	Warrant to Purchase Common Stock dated November 2, 2009 issued by the Registrant to Optimus CG II, Ltd.	Previously filed as Exhibit 10.128 to the Registrant's Registration Statement on Form S-1 filed on November 19, 2009 and incorporated herein by reference.

10.15	Subscription Agreement dated November 12, 2009 by and among the Registrant and the holders named on the signature pages thereto	Previously filed as Exhibit 10.129 to the Registrant's Registration Statement on Form S-1 filed on November 19, 2009 and incorporated herein by reference.
10.16	Form of Class A Common Stock Purchase Warrant	Previously filed as Exhibit 10.130 to the Registrant's Registration Statement on Form S-1 filed on November 19, 2009 and incorporated herein by reference.
10.17	Form of Class B Common Stock Purchase Warrant	Previously filed as Exhibit 10.131 to the Registrant's Registration Statement on Form S-1 filed on November 19, 2009 and incorporated herein by reference.
10.18	Form of Additional Investment Right	Previously filed as Exhibit 10.132 to the Registrant's Registration Statement on Form S-1 filed on November 19, 2009 and incorporated herein by reference.
10.19	Employment Agreement dated October 1, 2009 by and between the Registrant and Robert P. Lanza*	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on November 17, 2009 and incorporated herein by reference.
10.20	Promissory Note dated January 19, 2010 issued by the Registrant to JMJ Financial	Previously filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 7, 2010 and incorporated herein by reference.
10.21	Promissory Note dated March 30, 2010 issued by the Registrant to JMJ Financial	Previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on May 7, 2010 and incorporated herein by reference.
10.22	Promissory Note dated March 30, 2010 issued to JMJ Financial	Previously filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed on May 7, 2010 and incorporated herein by reference.
10.23	Promissory Note dated March 30, 2010 issued to JMJ Financial	Previously filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed on May 7, 2010 and incorporated herein by reference.
10.24	Letter Agreement dated March 30, 2010 by and between the Registrant and JMJ Financial	Previously filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed on May 7, 2010 and incorporated herein by reference.
10.25	Registration Rights Agreement dated March 30, 2010 by and between the Registrant and JMJ Financial	Previously filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed on May 7, 2010 and incorporated herein by reference.

10.26	Settlement Agreement and Mutual Release dated September 30, 2010 by and between the Registrant and Bristol Investment Fund, Ltd and Bristol Capital, LLC	Previously filed as Exhibit 99.1 to the Registrant's Quarterly Report on Form 10-Q filed on November 9, 2010 and incorporated herein by reference.
10.27	Form of Warrant to Purchase Common Stock to be issued to Socius CG II, Ltd.	Previously filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on January 3, 2011 and incorporated herein by reference.
10.28	Form of Warrant to Purchase Common Stock to be issued to Socius CG II, Ltd.	Previously filed as Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on January 3, 2011 and incorporated herein by reference.

10.29	Securities Purchase Agreement dated December 30, 2010 by and between the Registrant and Socius CG II Ltd.	Previously filed as Exhibit 99.1 to the Registrant's Current Report on Form 8-K filed on January 3, 2011 and incorporated herein by reference.
10.30	Letter Agreement dated December 30, 2010 by and among the Registrant and Optimus CG II, Ltd.	Previously filed as Exhibit 99.2 to the Registrant's Current Report on Form 8-K filed on January 3, 2011 and incorporated herein by reference.
10.31	Settlement Agreement and Mutual Release dated February 11, 2011 by and between the Registrant and Gemini Master Fund, Ltd.	Filed as Exhibit 10.149 to the Registrant's Annual Report on 10-K filed March 17, 2011 and incorporated herein by reference.
10.32	Settlement Agreement and Mutual Release dated August 9, 2011 by and among the Registrant, Midsummer Investment, Ltd. and Midsummer Small Cap Master, Ltd.	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on August 17, 2011 and incorporated herein by reference.
10.33	Amended and Restated Employment Agreement dated July 1, 2011 by and between the Registrant and Robert P. Lanza*	Previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on August 17, 2011 and incorporated herein by reference.
10.34	Amended and Restated Employment Agreement dated July 1, 2011 by and between the Registrant and Gary H. Rabin*	Previously filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on August 17, 2011 and incorporated herein by reference.
10.35	Settlement Agreement and Mutual Release Form used between the Registrant and several counter parties	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on December 12, 2011 and incorporated herein by reference.
10.36	Purchase Agreement dated September 19, 2012 by and between the Registrant and Lincoln Park Capital Fund, LLC	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 20, 2012 and incorporated herein by reference.
10.37	Registration Rights Agreement dated September 19, 2012 by and between the Registrant and Lincoln Park Capital Fund, LLC	Previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on September 20, 2012 and incorporated herein by reference.
10.38	Settlement Agreement and Mutual Release dated December 31, 2012 by and between the Registrant and CAMOFI Master LDC, and CAMHZN Master LDC	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 17, 2013 and incorporated herein by reference.
10.39	Form of Amortizing Senior Secured Convertible Debenture Issued to CAMOFI Master LDC	Previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on January 17, 2013 and incorporated herein by reference.
10.40	Form of Amortizing Senior Secured Convertible Debenture Issued to CAMHZN Master LDC	Previously filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on January 17, 2013 and incorporated herein by reference.

10.41	Form of Registration Rights Agreement between the Registrant and each of the holders signatory thereto	Previously filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on January 17, 2013 and incorporated herein by reference.

10.42	Office Lease Agreement dated January 11, 2013 by and between the Registrant and Wendy Jolles and Linda Olstein, Trustees of The Janelon Trust under Declaration of Trust dated January 28, 1975 and recorded with the Suffolk County Registry of Deeds in Book 8766, Page 558, as amended by instrument dated January 7, 1988 and recorded in Book 14432, Page 267	Previously filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on January 17, 2013 and incorporated herein by reference.
10.43	Executive Employment Agreement dated as of May 20, 2013, by and between the Registrant and Edward Myles	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 24, 2013 and incorporated herein by reference.
10.44	Mutual Release and Waiver Agreement, dated May 31, 2013 by and between the Registrant and JMJ Financial.	Previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on August 7, 2013 and incorporated herein by reference.
10.45	Share Exchange Agreement dated April 25, 2013 between the Registrant and Volation Capital Partners, LLC	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May1, 2013 and incorporated herein by reference.
10.46	Separation Agreement, dated as of January 21, 2014 by and between the Registrant and Gary Rabin.	Previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 22, 2014 and incorporated herein by reference.
10.47	Employment Agreement dated December 13, 2013 by and between the Registrant and Eddy Anglade*	Filed herewith
21.1	Subsidiaries of the Registrant	Filed herewith.
23.1	Consent of Independent Registered Public Accounting Firm	Filed herewith.
31.1	Certification of the Principal Executive Officer Pursuant to Rule 13a-14 of the Securities Exchange Act of 1934	Filed herewith.
31.2	Certification of the Principal Financial Officer Pursuant to Rule 13a-14 of the Securities Exchange Act of 1934	Filed herewith.
32.1	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to Section 1350	Filed herewith.

101.INS XBRL Instance Document**
101.SCH XBRL Schema Document**
101.CAL XBRL Calculation Linkbase Document**
101.DEF XBRL Definition Linkbase Document**
101.LAB XBRL Label Linkbase Document**
101.PRE XBRL Presentation Linkbase Document**

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* Management contract or compensatory plan or arrangement

** Pursuant to Rule 406T of Regulation S-T, these interactive data files are not deemed filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act or Section 18 of the Securities Exchange Act and otherwise not subject to liability.

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.

ADVANCED CELL TECHNOLOGY, INC.

Dated: April 1, 2014 By: /s/ Edward Myles
Edward Myles
Interim President, CFO & Executive Vice President of Corporate Development
(Principal Executive Officer, Principal Financial Officer and Principal Accounting 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.

/s/ Edward Myles — April 1, 2014
Edward Myles
Interim President, CFO & Executive Vice President of Corporate Development
(Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)

/s/ Robert Langer — April 1, 2014
Robert Langer
Director

/s/ Alan Shapiro — April 1, 2014
Alan Shapiro
Director

/s/ Gregory D. Perry — April 1, 2014
Gregory D. Perry
Director

/s/ Zohar Loshitzer — April 1, 2014
Zohar Loshitzer
Director

/s/ Michael Heffernan — April 1, 2014
Michael Heffernan
Director and Chairman of the Board

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
Advanced Cell Technology, Inc. and Subsidiary

We have audited the accompanying consolidated balance sheets of Advanced Cell Technology, Inc. and subsidiary (collectively, the "Company") as of December 31, 2013 and 2012, and the related consolidated statements of operations, stockholders' deficit, and cash flows for each of the three years in the period ended December 31, 2013. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Advanced Cell Technology, Inc. and subsidiary as of December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013, in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3 to the consolidated financial statements, the Company has an accumulated deficit of $313.8 million. This and other factors raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters also are described in Note 3. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Note 2 to the financial statements, the 2011 and 2012 consolidated financial statements have been restated to correct a misstatement.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Advanced Cell Technology, Inc. and subsidiary's internal control over financial reporting as of December 31,

2013, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Our report dated April 1, 2014 expressed an opinion that Advanced Cell Technology, Inc. and subsidiary had not maintained effective internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

/s/ SingerLewak LLP

Los Angeles, California
April 1, 2014

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS

AS OF DECEMBER 31, 2013 AND 2012

	December 31, 2013	December 31, 2012 As restated(1)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$1,743,485	$7,241,852
Other receivable	209,198	96,425
Deferred royalty fees, current portion	62,435	82,435
Prepaid expenses and other assets	896,741	132,044
Total current assets	2,911,859	7,552,756
Property and equipment, net	753,576	175,256
Deferred royalty fees, less current portion	107,780	170,216
Other Assets	68,801	29,856
Deferred costs, net of amortization of $6,165,098 and $5,662,543 at December 31, 2013 and 2012, respectively	65,903	568,458
TOTAL ASSETS	$3,907,919	$8,496,542
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Accounts payable	$2,285,331	$2,956,743
Accrued expenses	3,545,713	3,210,908
Accrued settlement	4,086,619	6,807,891
Convertible promissory notes, current portion net of discounts of $0 and $30,935 at December 31, 2013 and 2012, respectively	–	256,850
Senior secured convertible promissory notes, current portion, net of discount of $225,324 and $290,000 at December 31, 2013 and 2012, respectively	2,174,676	2,110,000
Embedded conversion option liabilities, current portion	335,208	460,668
Unsettled warrant obligation	3,899,391	3,791,953
Loss contingency accrual	6,431,979	3,670,287
Deferred revenue, current portion	157,872	224,935
Total current liabilities	22,916,789	23,490,235
Senior secured convertible promissory notes, less current portion, net of discount of $37,553 and $435,000 at December 31, 2013 and 2012, respectively	1,162,447	3,165,000
Embedded conversion option liabilities, less current portion	327,792	507,033
Warrant and option derivative liabilities	284,799	972,381

Deferred revenue, less current portion	1,749,702	1,907,574
Total liabilities	26,441,529	30,042,223
Series A-1 redeemable preferred stock, $0.001 par value; 50,000,000 shares authorized, 0 and 113 shares issued and outstanding; aggregate liquidation value, net of discounts: $0 and $1,607,497 at December 31, 2013 and 2012, respectively	–	1,598,533
Commitments and contingencies		
STOCKHOLDERS' DEFICIT:		
Preferred stock, Series B; $0.001 par value; 50,000,000 shares authorized, 1,000 shares issued and outstanding	1	1
Preferred stock, Series C; $0.001 par value; 50,000,000 shares authorized, 1,750 shares issued and outstanding	2	2
Common stock, $0.001 par value; 3,750,000,000 shares authorized, 2,640,264,975 and 2,232,720,779 shares issued and outstanding	2,640,265	2,232,721
Additional paid-in capital	322,683,874	289,093,619
Promissory notes receivable, net of discount of $2,018,321 and $3,776,528, respectively	(34,013,395)	(31,622,696)
Accumulated deficit	(313,844,357)	(282,847,861)
Total stockholders' deficit	(22,533,610)	(23,144,214)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$3,907,919	$8,496,542

(1) See Note 2 “Restatement of Previously Issued Financial Statements” of Notes to Consolidated Financial Statements

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

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS

FOR THE YEARS ENDED DECEMBER 31, 2013, 2012 AND 2011

	2013	2012 As restated (1)	2011 As restated (1)
Revenue (License fees and royalties)	$224,985	$466,487	$506,419
Cost of Revenue	82,436	117,436	343,950
Gross profit	142,549	349,051	162,469
Operating expenses:			
Research and development	11,564,768	14,158,936	9,753,759
General and administrative	12,057,067	11,432,866	7,435,709
Litigation settlement contingency	6,228,621	–	–
Loss on settlement of litigation	–	–	294,144
Total operating expenses	29,850,456	25,591,802	17,483,612
Loss from operations	(29,707,907)	(25,242,751)	(17,321,143)
Non-operating income (expense):			
Interest income	165,918	15,581	35,114
Interest expense	(1,437,584)	(1,104,602)	(1,510,693)
Finance gain (loss)	95,162	(7,015,470)	(54,984,170)
Adjustment to fair value of unsettled warrant obligation	(107,438)	1,390,382	7,963,101
Loss on disposal of fixed assets	–	(17,138)	–
Gain on extinguishment of debt	438,587	–	–
Loss attributable to equity method investments	–	–	(820,000)
Fines and penalties	(962,227)	(3,500,000)	–
Adjustments to fair value of derivatives	493,241	889,883	11,444,988
Total non-operating expense	(1,314,341)	(9,341,364)	(37,871,660)
Loss before provision for income tax	(31,022,248)	(34,584,115)	(55,192,803)
Provision for income tax	–	–	–
Net loss	$(31,022,248)	$(34,584,115)	$(55,192,803)
Weighted average shares outstanding :			
Basic and diluted	2,491,872,696	2,086,619,741	1,582,095,095
Loss per share:			
Basic and diluted	$(0.01)	$(0.02)	$(0.03)

(1) See Note 2 “Restatement of Previously Issued Financial Statements” of Notes to Consolidated Financial Statements

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

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT

FOR THE YEARS ENDED DECEMBER 31, 2013, 2012 AND 2011

	Series B Preferred Stock		Series C Preferred Stock		Common Stock		Additional Paid-in	Promissory Notes Receivables,	Accumulated	Total Stockholde
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	net	Deficit	Deficit
Balance December 31, 2010 as previously reported	**1,000**	**$1**	**400**	**$–**	**1,439,826,362**	**$1,439,826**	**$166,033,976**	**$(10,177,370)**	**$(180,949,523)**	**$(23,653,09**
Prior period adjustments(1)							**(1,064,499)**		**(12,080,937)**	**(13,145,4**
Balance – December 31, 2010 as restated (1)	**1,000**	**$1**	**400**	**$–**	**1,439,826,362**	**$1,439,826**	**$164,969,477**	**$(10,177,370)**	**(193,030,460)**	**(36,798,52**
Convertible debenture redemptions	–	–	–	–	1,519,077	1,519	150,390	–	–	151,909
Shares issued for compensation	–	–	–	–	15,571,152	15,571	2,658,389	–	–	2,673,960
Shares issued for accrued liabilities	–	–	–	–	23,205,895	23,206	2,998,693	–	–	3,021,899
Common stock issued for settlements recorded as financing costs	–	–	–	–	133,645,953	133,646	22,029,270	–	–	22,162,91
Warrant exercises	–	–	–	–	37,477,368	37,478	10,246,139	–	–	10,283,61
Option exercises	–	–	–	–	1,386,126	1,386	196,276	–	–	197,662
Shares issued for services	–	–	–	–	2,381,406	2,381	473,519	–	–	475,900
Accrued dividends on Series B and C preferred stock	–	–	–	–			1,432,661	–	(1,432,661)	
Accretion of note receivable	–	–	–	–				(1,371,865)	1,371,865	

discount Series B and C Preferred Stock											
Option compensation charges		–		–	–		–	67,287	–	–	67,287
Issuance of Series C preferred stock	–	–	750	1				7,499,999		- –	7,500,000
Issuance of Common Stock to Series C Preferred Stock holder for note receivable	–	–	–	–	73,796,597	73,797		9,786,161	(9,859,958)		–
Common stock issued upon exercise of Series C Preferred Stock warrants and issuance of note receivable	–	–	-	–	14,759,319	14,759		1,957,233	(1,971,992)		
Stock option reclass from equity to liability								(3,099,883)			(3,099,883
Net loss for year ended December 31, 2011(1)	–	–	–	–	–		–	–	–	(55,192,803)	(55,192,80
Balance December 31, 2011(1)	**1,000**	**$1**	**1,150**	**$1**	**1,743,569,255**	**$1,743,569**		**$221,365,611**	**$(23,381,185)**	**$(248,284,059)**	**$(48,556,06**
Shares issued for settlements	–	–	–	–	330,690,982	330,692		38,096,321	–	–	38,427,01
Shares issued for services	–	–	–	–	14,077,873	14,078		1,802,552	–	–	1,816,630
Accrued dividends on Series B and C Preferred Stock	–	–	–	–	–		–	2,048,007	–	(2,048,007)	–
Accretion of note receivable discount on Series B and C Preferred Stock	–	–	–	–	–		–	–	(2,068,320)	2,068,320	–
Option compensation charges	–	–	–	–	–		–	7,795,885	–	–	7,795,885
	–	–	600	1	–		–	5,999,999	–	–	6,000,000

Issuance of Series C preferred stock										
Issuance of Common Stock to Series C Preferred Stock holder for note receivable	–	–	–	–	73,817,224	73,817	5,070,509	(5,144,326)	–	–
Common stock issued upon exercise of Series C Preferred Stock warrants and issuance of note receivable	–	–	–	–	14,763,445	14,763	1,014,102	(1,028,865)	–	–
Issuance of 47,052,000 shares of common stock	–	–	–	–	47,052,000	47,052	2,809,500	–	–	2,856,552
Issuance of 8,750,000 shares as a commitment fee	–	–	–	–	8,750,000	8,750	(8,750)	–	–	–
Stock option reclass from liability to equity							3,099,883			3,099,883
Net loss for year ended December 31, 2012(1)	–	–	–	–	–	–	–	–	(34,584,115)	(34,584,11
Balance December 31, 2012(1)	**1,000**	**$1**	**1,750**	**$2**	**2,232,720,779**	**$2,232,721**	**$289,093,619**	**$(31,622,696)**	**$(282,847,861)**	**$(23,144,21**
Shares issued for settlements	–	–	–	–	112,164,595	112,164	6,187,836	–	–	6,300,000
Shares issued for services	–	–	–	–	14,596,768	14,597	1,747,756	–	–	1,762,353
Accrued dividends on Series B and C Preferred Stock	–	–	–	–	–	–	2,364,947	–	(2,364,947)	–
Accretion of note receivable discount on Series B and C Preferred Stock	–	–	–	–	–	–	–	(2,390,699)	2,390,699	–
Option compensation	–	–	–	–	–	–	3,880,058	–	–	3,880,058

charges										
Redemption of Series A Preferred Stock	–	–	-	-	27,522,833	27,523	1,885,314	–	–	1,912,837
Issuance of 253,260,000 shares of common stock	–	–	–	–	253,260,000	253,260	17,524,344	–	–	17,777,60
Net loss for the year ended December 31, 2013	–	–	–	–	–	–	–	–	(31,022,248)	(31,022,24
Balance December 31, 2013	**1,000**	**$1**	**1,750**	**$2**	**2,640,264,975**	**$2,640,265**	**$322,683,874**	**$(34,013,395)**	**$(313,844,357)**	**$(22,533,61**

(1) See Note 2 “Restatement of Previously Issued Financial Statements” of Notes to Consolidated Financial Statements

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

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2013, 2012 AND 2011

	2013	2012 As restated(1)	2011 As restated(1)
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$(31,022,248)	$(34,584,115)	$(55,192,803)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	93,507	58,637	67,161
Amortization of deferred charges	112,436	117,436	91,600
Amortization of deferred revenue	(224,935)	(466,487)	(506,419)
Redeemable preferred stock dividend accrual	43,873	135,235	122,605
Stock based compensation	3,880,058	7,795,885	67,286
Amortization of deferred issuance costs	502,555	807,989	1,201,741
Amortization of discounts	502,022	161,379	180,172
Adjustments to fair value of warrant obligation	107,438	(1,390,382)	(7,963,101)
Adjustments to fair value of derivatives	(493,241)	(889,883)	(11,444,988)
Shares of common stock issued for services	–	–	475,900
Shares of common stock issued for compensation	1,762,353	1,816,630	2,673,960
Non-cash financing costs	6,133,459	7,015,470	54,984,170
Loss on settlement of litigation	–	–	294,144
Gain on extinguishment of debt	(438,587)	–	–
Loss on disposal of fixed assets	–	17,138	–
Amortization of deferred joint venture obligations	–	–	(6,870)
Warrant and options issued for consulting services	41,460	60,388	834,443
Changes in operating assets and liabilities			
Grants receivable	(112,773)	(96,425)	–
Prepaid expenses and other current assets	(794,697)	34,204	(241,248)
Deferred revenue	–	300,000	–
Accounts payable and other current liabilities	(2,057,879)	4,500,544	734,960
Net cash used in operating activities	(21,965,199)	(14,606,357)	(13,627,287)
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of property and equipment	(671,827)	(96,260)	(36,830)
Payment of lease deposits	(38,945)	(15,090)	–
Net cash used in investing activities	(710,772)	(111,350)	(36,830)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from exercise of warrants and options	–	–	3,377,715
Repayment of convertible debentures	(600,000)	–	–

Proceeds from convertible promissory notes	–	–	–
Proceeds from issuance of preferred stock	–	6,000,000	7,500,000
Proceeds from issuance of common stock	17,777,604	2,941,102	–
Costs associated with issuance of common stock	–	(84,550)	–
Net cash provided by financing activities	17,177,604	8,856,552	10,877,715
NET DECREASE IN CASH AND CASH EQUIVALENTS	(5,498,367)	(5,861,155)	(2,786,402)
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE	7,241,852	13,103,007	15,889,409
CASH AND CASH EQUIVALENTS, ENDING BALANCE	$1,743,485	$7,241,852	$13,103,007
CASH PAID FOR:			
Interest	$389,133	$–	$–
Income taxes	$–	$–	$–
SUPPLEMENTAL DISCLOSURE OF NON-CASH FINANCING ACTIVITIES:			
Issuance of 0, 0 and 1,519,077 shares of common stock in redemption of debt	$–	–	$151,909
Issuance of note receivable on issuance of shares and exercise of warrants for 0, 88,580,669, and 88,555,916 shares of common stock	$–	$7,200,000	$13,800,000
Record note receivable discount related to Series C preferred stock	$–	$(1,026,809)	$(1,968,050)
Accrued dividends on Series B and C Preferred Stock	$2,364,947	$2,048,007	$1,432,661
Accretion of note receivable discount on Series B and C Preferred Stock	$2,390,699	$2,068,320	$1,371,865
Issuance of 0, 0 and 3,252,066 and shares of common stock for cashless exercise of warrants	$–	$–	$1,156,861
Issuance of 0, 0 and 636,126 and shares of common stock for exercise of options	$–	$–	$160,162
Issuance of 0, 0 and 30,618,895 and shares of common stock for accrued liabilities	$–	$–	$6,521,899
Issuance of 112,164,595, 330,690,982, and 126,232,953 shares of common stock for accrued settlement	$6,300,000	$38,427,013	$18,662,916
Issuance of 0, 8,750,000, and 0 shares of common stock as commitment fee for securities purchase agreement	$–	$700,000	$–
Conversion of Series A Preferred stock for 27,522,833 shares of common stock	1,912,837	–	–
Issuance of senior secured convertible promissory notes for settlement	$–	$6,000,000	$–

(1) See Note 2 “Restatement of Previously Issued Financial Statements” of Notes to Consolidated Financial Statements

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

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATIONAL MATTERS

Organization and Nature of Business

Advanced Cell Technology, Inc., the Company, is a biotechnology company, incorporated in the state of Delaware, focused on developing and commercializing human embryonic and adult stem cell technology in the emerging fields of regenerative medicine. Principal activities to date have included obtaining financing, securing operating facilities, and conducting research and development. The Company has no therapeutic products currently available for sale and does not expect to have any therapeutic products commercially available for sale for a period of several years, if at all. These factors indicate that the Company's ability to continue its research and development activities is dependent upon the ability of management to obtain additional financing as required.

2. RESTATEMENT OF PREVIOUSLY ISSUED CONSOLIDATED FINANCIAL STATEMENTS

On March 10, 2014, we concluded that our previously issued consolidated financial statements required a restatement for the years ended December 31, 2012 and 2011. We determined that a misapplication of accounting guidance relating to certain warrants and an associated full-ratchet anti-dilution feature that was included in these warrants occurred. We subsequently concluded that we had an error with our stock option compensation accounting as a result of having inadequate authorized, unissued shares available for our outstanding options in certain periods. As a result of these errors we determined that our financial statements for the following periods (the "Applicable Periods") required a restatement and could no longer be relied upon: the fiscal years ended December 31, 2009, December 31, 2010, December 31, 2011 and December 31 2012; each quarterly period in 2011 and 2012; and the first three quarterly periods in its fiscal year ended December 31, 2013.

Warrant Accounting Issue

Two separate warrant agreements entered into in September 2005 contained a full ratchet, anti-dilution feature which entitled the holders to automatic adjustments in the number and purchase price of their shares, if the Company issued lower-priced shares between May 1, 2005 and January 15, 2009, the "pricing period". From the original date of the

warrant until the exercise of the warrants in September 2006, the anti-dilution embedded derivative feature was properly accounted for and recorded at its fair value. From the date of exercise through the end of the pricing period, the full ratchet feature remained in effect but was not accounted for or recorded at its fair value, which resulted in an accounting error. In determining the proper accounting, management performed a valuation of this full ratchet embedded derivative using a Monte Carlo simulation model. The results of the valuation and analysis through SAB 99 criteria on materiality, led management to conclude that a restatement for any periods prior to 2009 was not necessary.

Management further determined that as of the end of the pricing period an adjustment to the shares and purchase price of the shares should have taken place per the full ratchet anti-dilution feature of the agreement. As the matter went to litigation this contractual obligation was never settled and became fixed at 63.2 million shares with a floor price of $0.06. This unsettled warrant contractual obligation should have been recorded from the end of the pricing period until settlement with accounting treatment, under ASC 815, requiring mark-to-market adjustments at each reporting date. Management also continues to evaluate the application of ASC 450, *Contingencies*, for the year ended December 31, 2013, as it relates to the ongoing, previously disclosed, legal dispute between the Company and the warrant holders.

Management analyzed the resulting impact on the financial statements through a SAB 99 analysis. The cumulative impact from 2009 through the third quarter of 2013 resulted in an additional net loss of approximately $1.3 million and an increase to liabilities of approximately $1.3 million. Due to the resulting financial statement impact within the years impacted, the Company has determined it is necessary to restate its financial statements for the Applicable Periods.

Stock Option Compensation Issue related to inadequate authorized and unissued shares to settle share based awards in shares

The Company examined periods being restated for the warrant liability issue to determine if authorized, unissued share availability was an issue in relation to instruments that have share based settlement requirements. Through this analysis it was determined that stock options were impacted in certain periods while other instruments such as warrants, convertible debt and preferred stock already had liability classification and therefore would not be impacted by inadequate authorized, unissued shares available.

It was determined that in Q1 2009, Q2 2009 and Q4 2011 options outstanding were impacted by the lack of authorized, unissued shares available. It was further determined that the date in which committed shares exceeded unauthorized was February 9, 2009 and that shortage of available shares ran through September 10, 2009, when additional authorized shares were approved. As for 2011, the share issue began on November 2, 2011 and ran through January 24, 2012, when additional authorized shares were approved.

As per the accounting requirements of ASC 718, the inadequate share issue caused the accounting to change from equity based to liability based accounting, with the vested options to be measured at fair value as a liability until such time as adequate shares were approved and the accounting for the stock compensation would revert back to equity based accounting.

This accounting error in treating the stock compensation as equity throughout these periods with inadequate authorized unissued shares, led the Company to re-measure all stock options impacted during these periods to effect the proper accounting treatment.

Management analyzed the resulting impact on the financial statements through a SAB 99 analysis. The cumulative impact from 2009 through the third quarter of 2013 resulted in a reduction of the net loss of approximately $0.3 million and a decrease to additional-paid-in-capital of approximately $.3 million. Due to the resulting financial statement impact within the years impacted, the Company has determined it is necessary to restate its financial statements for the Applicable Periods.

The following tables summarize the effects of the restatement and presentation reclassifications on our previously issued consolidated financial statements:

Summary of increases (decreases) in Net Loss for the years ended December 31, 2012 and 2011

	December 31, 2012	2011
Net loss, as previously reported	$(28,526,261)	$(72,795,119)
Net adjustments		
Research and development	(3,124,100)	199,465
General and administrative expenses	(980,636)	3,589,750
Adjustments to fair value of unsettled warrant obligation	(1,953,118)	13,813,101
Net loss, restated	$(34,584,115)	$(55,192,803)
Basic loss per share:		
Net loss, as previously reported	$(0.01)	$(0.05)
Net adjustments		
Research and development	0.00	0.00
General and administrative expenses	(0.01)	0.00
Adjustments to fair value of unsettled warrant obligation	(0.00)	0.02
Net loss, restated	$(0.02)	$(0.03)
Diluted loss per share:		
Net loss, as previously reported	$(0.01)	$(0.05)
Net adjustments		
Research and development	0.00	0.00
General and administrative expenses	(0.01)	0.00
Adjustments to fair value of unsettled warrant obligation	(0.00)	0.02
Net loss, restated	$(0.02)	$(0.03)
Weighted average shares used in computing net loss per share:		
Basic	2,086,619,741	1,582,095,095
Diluted	2,086,619,741	1,582,095,095

Restatement adjustments on our Accumulated deficit as of January 1, 2011

	Amount
Accumulated deficit, January 1, 2011, as previously reported	$(180,949,523)
Restatement adjustments:	
Adjustments to Additional Paid in Capital for tainted shares	1,064,499
Adjustments to fair value of unsettled warrant obligation	(13,145,436)
Accumulated deficit, January 1, 2011, as restated	$(193,030,460)

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Consolidated Balance Sheet impact as of December 31, 2012

	As of December 31, 2012		
	As Previously Reported	Adjustments	As Restated
Assets			
Current assets:			
Cash and cash equivalents	$7,241,852	$–	$7,241,852
Grants receivable	96,425	–	96,425
Deferred royalty fees, current portion	82,435	–	82,435
Prepaid expenses	132,044	–	132,044
Total current assets	7,552,756	–	7,552,756
Property and equipment, net	175,256	–	175,256
Deferred royalty fees, less current portion	170,216	–	170,216
Deposits	29,856	–	29,856
Deferred costs, net	568,458	–	568,458
Total assets	$8,496,542	$–	$8,496,542
Liabilities and Stockholders' Deficit			
Current liabilities:			
Accounts payable	$2,956,743	$–	$2,956,743
Accrued expenses	3,210,908	–	3,210,908
Accrued settlement	6,807,891	–	6,807,891
Convertible promissory notes, current portion	256,850	–	256,850
Senior secured convertible promissory notes, current portion	2,110,000	–	2,110,000
Embedded conversion option liabilities, current portion	460,668	–	460,668
Unsettled warrant obligation	–	3,791,953	3,791,953
Loss contingency accrual	6,176,787	(2,506,500)	3,670,287
Deferred revenue, current portion	224,935	–	224,935
Total current liabilities	22,204,782	1,285,453	23,490,235
Senior secured convertible promissory notes, less current portion	3,165,000	–	3,165,000
Embedded conversion option liabilities, less current portion	507,033	–	507,033
Warrant and option derivative liabilities	972,381	–	972,381
Deferred revenue, less current portion	1,907,574	–	1,907,574
Total liabilities	28,756,770	1,285,453	30,042,223
Series A-1 redeemable preferred stock	1,598,533	–	1,598,533
Stockholders' Deficit:			
Preferred stock, Series B	1	–	1
Preferred stock, Series C	2	–	2
Common stock	2,232,721	–	2,232,721
Additional paid-in capital	289,842,597	(748,978)	289,093,619
Promissory notes receivable, net	(31,622,696)	–	(31,622,696)
Accumulated deficit	(282,311,386)	(536,475)	(282,847,861)
Total stockholders' deficit	(21,858,761)	(1,285,453)	(23,144,214)
Total liabilities and stockholders' deficit	$8,496,542	$–	$8,496,542

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Consolidated Statement of Operations impact for the year ended December 31, 2012

	For the Year Ended December 31, 2012		
	As Previously Reported	Adjustments	As Restated
Revenue	$466,487	$–	$466,487
Cost of revenue	117,436	–	117,436
Gross profit	349,051	–	349,051
Operating expenses:			
Research and development	11,034,836	3,124,100	14,158,936
General and administrative expenses	10,452,230	980,636	11,432,866
Total operating expenses	21,487,066	4,104,736	25,591,802
Loss from operations	(21,138,015)	(4,104,736)	(25,242,751)
Non-operating income (expense):			
Interest income	15,581	–	15,581
Interest expense and late fees	(1,104,602)	–	(1,104,602)
Finance gain (cost)	(3,671,970)	(3,343,500)	(7,015,470)
Gain (loss) on disposal of fixed assets	(17,138)	–	(17,138)
Fines and penalties	(3,500,000)	–	(3,500,000)
Adjustments to fair value of unsettled warrant obligation	–	1,390,382	1,390,382
Adjustments to fair value of derivatives	889,883	–	889,883
Total non-operating expense	(7,388,246)	(1,953,118)	(9,341,364)
Loss before provision for income tax	(28,526,261)	(6,057,854)	(34,584,115)
Provision for income tax	–	–	–
Net loss	$(28,526,261)	$(6,057,854)	$(34,584,115)
Loss per share:			
Basic	$(0.01)	$(0.01)	$(0.02)
Diluted	(0.01)	(0.01)	(0.02)
Weighted average shares outstanding:			
Basic	2,086,619,741	2,086,619,741	2,086,619,741
Diluted	2,086,619,741	2,086,619,741	2,086,619,741

Consolidated Statement of Operations impact for the year ended December 31, 2011

	For the Year Ended December 31, 2011		
	As Previously Reported	Adjustments	As Restated
Revenue	$506,419	$–	$506,419
Cost of revenue	343,950	–	343,950
Gross profit	162,469	–	162,469
Operating expenses:			
Research and development	9,953,224	(199,465)	9,753,759
General and administrative expenses	11,025,459	(3,589,750)	7,435,709
Loss on settlement of litigation	294,144	–	294,144
Total operating expenses	21,272,827	(3,789,215)	17,483,612
Loss from operations	(21,110,358)	3,789,215	(17,321,143)
Non-operating income (expense):			
Interest income	35,114	–	35,114
Interest expense and late fees	(1,510,693)	–	(1,510,693)
Finance gain (cost)	(60,834,170)	5,850,000	(54,984,170)
Loss attributable to equity method investments	(820,000)	–	(820,000)
Adjustments to fair value of unsettled warrant obligation	–	7,963,101	7,963,101
Adjustments to fair value of derivatives	11,444,988	–	11,444,988
Total non-operating expense	(51,684,761)	13,813,101	(37,871,660)
Loss before provision for income tax	(72,795,119)	17,602,316	(55,192,803)
Provision for income tax	–	–	–
Net loss	$(72,795,119)	$17,602,316	$(55,192,803)
Loss per share:			
Basic	$(0.05)	$0.02	$(0.03)
Diluted	(0.05)	0.02	(0.03)
Weighted average shares outstanding:			
Basic	1,582,095,095	1,582,095,095	1,582,095,095
Diluted	1,582,095,095	1,582,095,095	1,582,095,095

Consolidated Statement of Stockholders' Deficit Impact

In addition to the effects on the consolidated balance sheets as of December 31, 2012, and consolidated statements of operations for the years ended December 31, 2012 and 2011, discussed above, the restatement affected the consolidated statements of stockholders' deficit as of December 31, 2012 and 2011. Stockholders' deficit as of January 1, 2011, is $36,798,526 as restated, compared to $23,653,090 as previously reported.

The following table sets forth the effects of the restatement on our consolidated stockholders' deficit as of December 31, 2012 and 2011:

Consolidated Statement of Stockholders' Deficit Impact

	For the Year Ended December 31,	
	2012	2011
Stockholders' deficit, as previously reported	$(21,858,761)	$(46,123,844)
Effect of restatement adjustment on net loss for the current period	(6,057,854)	17,602,316
Adjustment to additional paid-in capital for the current period	(748,978)	(7,953,597)
Cumulative adjustment to accumulated deficit	5,521,379	(12,080,937)
Total restatement adjustments	(1,285,453)	(2,432,218)
Stockholders' deficit, as restated	$(23,144,214)	$(48,556,062)

Consolidated Statement of Cash Flows Impact

The following table includes selected information from our consolidated statements of cash flows presenting previously reported and restated cash flows, for the years ended December 31, 2012 and 2011:

Consolidated Statement of Cash Flows Impact

	For the Year Ended December 31,	
	2012	2011
	As Restated	As Restated

	As Previously Reported		As Previously Reported	
Net loss	$(28,526,261)	$(34,584,115)	$(72,795,119)	$(55,192,803)
Stock based compensation	3,691,149	7,795,885	3,856,501	67,286
Adjustments to fair value of unsettled warrant obligation	–	(1,390,382)	–	(7,963,101)
Non-cash financing costs	3,671,970	7,015,470	60,834,170	54,984,170
Net cash used in operating activities	(14,606,357)	(14,606,357)	(13,627,287)	(13,627,287)

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation —The Company follows accounting standards set by the Financial Accounting Standards Board , FASB. The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, GAAP. References to GAAP issued by the FASB in these footnotes are to the FASB Accounting Standards Codification,™ sometimes referred to as the Codification or ASC.

The accompanying consolidated financial statements have been prepared in conformity with GAAP which contemplate continuation of the company as a going concern. However, as of December 31, 2013, the Company has an accumulated deficit of $313.8 million. This and other factors, such as the Company’s cash balance, raise substantial doubt about the Company’s ability to continue as a going concern. The ability to continue as a going concern is dependent upon many factors, including the Company’s ability to raise additional capital in a timely manner, which management plans to do. The accompanying financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

Principles of Consolidation — The accounts of the Company and its wholly-owned subsidiary Mytogen, Inc., or Mytogen, are included in the accompanying consolidated financial statements. Any intercompany balances and transactions were eliminated in consolidation.

Segment Reporting —ASC 280, *"Segment Reporting"* requires use of the "management approach" model for segment reporting. The management approach model is based on the way a company's management organizes segments within the company for making operating decisions and assessing performance. The Company determined it has one operating segment. Disaggregation of the Company's operating results is impracticable, because the Company's research and development activities and its assets overlap, and management reviews its business as a single operating segment. Thus, discrete financial information is not available by more than one operating segment.

Use of Estimates — These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Specifically, the Company's management has estimated loss contingencies related to outstanding litigation. In addition, Management has estimated variables used to calculate the Black-Scholes option pricing model used to value derivative instruments as discussed below under "Fair Value Measurements". Also, management has estimated the expected economic life and value of the Company's licensed technology, the Company's net operating loss for tax purposes, share-based payments for compensation to employees, directors, consultants and investment banks, and the useful lives of the Company's fixed assets. Actual results could differ from those estimates.

Reclassifications — Certain prior period financial statement balances have been reclassified to conform to the current period presentation.

Cash and Cash Equivalents — Cash equivalents are comprised of certain highly liquid investments with maturities of three months or less when purchased. The Company maintains its cash in bank deposit accounts, which at times, may exceed federally insured limits. The Company has not experienced any losses related to this concentration of risk. As of December 31, 2013, and 2012, the Company had deposits in excess of federally-insured limits totaling $1,668,232, and $5,147,037 respectively.

Grant Received — From time to time the Company participates in research grants both as an initiator of grants as well as a sub-recipient of grant funds. The Company incurs costs for the grant and is subsequently reimbursed for these expenses by grant receipts. The Company records such receipts as a reduction in research and development costs. For the years ended December 31, 2013, 2012 and 2011 , the Company recorded as a reduction in research and development costs, $160,054, $320,112 and $68,639, respectively.

Grants Receivable — The Company periodically assesses its grants receivable for collectability on a specific identification basis. If collectability of an account becomes unlikely, the Company records an allowance for that doubtful account. Once the Company has exhausted efforts to collect, management writes off the grants receivable against the allowance it has already created.

Property and Equipment — The Company records its property and equipment at historical cost. The Company expenses maintenance and repairs as incurred. Upon disposition of property and equipment, the gross cost and accumulated depreciation are written off and the difference between the proceeds and the net book value is recorded as a gain or loss on sale of assets. In the case of certain assets acquired under capital leases, the assets are recorded net of imputed interest, based upon the net present value of future payments. Assets under capital lease are pledged as collateral for the related lease.

The Company provides for depreciation over the assets' estimated useful lives as follows:

Machinery & equipment	4 years
Computer equipment	3 years
Office furniture	4 years
Leasehold improvements	Lesser of lease life or economic life
Capital leases	Lesser of lease life or economic life

Patents — The Company follows ASC 350-30 *"General Intangibles Other than Goodwill"* in accounting for its patents. ASC 350-30 provides that costs of internally developing, maintaining, or restoring intangible assets that are not specifically identifiable, that have indeterminate lives, or that are inherent in a continuing business and related to an entity as a whole, shall be recognized as an expense when incurred. The Company has expensed as research and development expense all costs associated with developing its patents.

Equity Method Investment — The Company follows ASC 323 *"Investments-Equity Method and Joint Ventures"* in accounting for its investment in the joint venture with CHA Bio & Diostech Co. Ltd. (see Note 4). In the event the Company's share of the joint venture's net losses reduces the Company's investment to zero, the Company will discontinue applying the equity method and will not provide for additional losses unless the Company has guaranteed obligations of the joint venture or is otherwise committed to provide further financial support for the joint venture. If the joint venture subsequently reports net income, the Company will resume applying the equity method only after its share of that net income equals the share of net losses not recognized during the period the equity method was suspended.

Deferred Costs — Consist of the following:

(a) Payments, either in cash or share-based, made in connection with the sale of debentures which are amortized using the effective interest method over the lives of the related debentures. These deferred issuance costs are charged to financing costs when and if the related debt instrument is retired or converted early. The weighted average amortization period for deferred debt issuance costs is 48 months.

(b) Payments made to secure commitments under certain financing arrangements. These amounts are recognized in financing costs ratably over the period of the financing arrangements, and are recognized in financing costs immediately if the arrangement is cancelled, forfeited or the utility of the arrangement to the company is otherwise compromised.

(c) Payments made to financial institutions and consulting firms in order to provide financing related services. These costs are being amortized over the terms of the related agreements.

Long-Lived Assets — The Company follows ASC 360-10, *"Property, Plant, and Equipment,"* which established a "primary asset" approach to determine the cash flow estimation period for a group of assets and liabilities that represents the unit of accounting for a long-lived asset to be held and used. Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. Through December 31, 2013, the Company had not experienced impairment losses on its long-lived assets.

Fair Value Measurements — The Company applies the provisions of ASC 820-10, *"Fair Value Measurements and Disclosures."* ASC 820-10 defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. For certain financial instruments,

including cash and cash equivalents, grants receivable, prepaid expenses, accounts payable and accrued expenses, the carrying amounts approximate fair value due to their relatively short maturities. The three levels of valuation hierarchy are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.

- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The Company analyzes all financial instruments with features of both liabilities and equity under ASC 480, *"Distinguishing Liabilities From Equity"* and ASC 815, *"Derivatives and Hedging."* Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as adjustments to fair value of derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

The Company uses Level 2 inputs for its valuation methodology for certain warrant derivative liabilities. The Company's derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as adjustments to fair value of derivatives.

The Company uses Level 3 inputs for its valuation methodology for the fair value of certain embedded conversion options and warrant and option derivative liabilities.

The Company estimates the fair value of the embedded conversion option associated with its 8% convertible debentures using a binomial lattice, which estimates and compares the present value of the principal and interest payments to the as converted value to determine whether the holder of the notes should convert the notes into the Company's common stock or continue to receive principal and interest payments. The Company uses this methodology to determine the beneficial conversion features because there are no observable inputs available with respect to the fair value.

The binomial lattice relies on the following Level 3 inputs: (1) expected volatility of our common stock; (2) potential discount for illiquidity of large blocks of our common stock, and (3) discount rate for contractual debt principal and interest payments. The fair value of the embedded beneficial conversion feature is estimated as the difference between the fair value of the notes with and without the conversion feature. The fair value of the notes without the conversion feature is determined using one Level 3 input, the discount rate for contractual debt interest and principal payments.

- The expected volatility of the Company's common stock is estimated from the historical volatility of daily returns in the Company's common stock price. The Company monitors the volatility of its common stock on a quarterly basis to observe trends that may impact the fair value of the notes.

- The discount for illiquidity is measured using an average-strike option that calculates the discount as the opportunity cost for not being able to sell a large block of the Company's common stock immediately at prevailing observable market prices. Inputs to the average-strike option model include the expected volatility of the Company's common stock and time to sell a large block of the Company's stock as Level 3 inputs and other observable inputs. The time to sell the stock is estimated considering the historical daily trading volume of our common stock and market maker estimates of the amount of shares that can be offered for sale above the normal the daily trading volume without depressing the price of the Company's common stock.

At December 31, 2013, the Company identified the following assets and liabilities that are required to be presented on the balance sheet at fair value:

	Fair Value	Fair Value Measurements at

Description	As of December 31, 2013	December 31, 2013 Using Fair Value Hierarchy		
		Level 1	Level 2	Level 3
Warrant and option derivative liabilities	$284,799	$–	–	284,799
Embedded conversion option liabilities	663,000	–		663,000
Unsettled warrant obligation	3,899,391	3,899,391		
Total	$4,847,190	$3,899,391	–	947,799

At December 31, 2012, the Company identified the following assets and liabilities that are required to be presented on the balance sheet at fair value:

Description	Fair Value As of December 31, 2012	Fair Value Measurements at December 31, 2012 Using Fair Value Hierarchy		
		Level 1	Level 2	Level 3
Warrant and option derivative liabilities	$972,381	$–	–	972,381
Embedded conversion option liabilities	967,701	–	122,701	845,000
Unsettled warrant obligation	3,791,953	3,791,953		
Total	$5,732,035	$3,791,953	122,701	1,817,381

The following tables reconcile the change in fair value for measurements categorized within Level 3 of the fair value hierarchy:

	Embedded Conversion Option Liabilities
Balance at December 31, 2012	$ 845,000
Total (gains) or losses for the period included in earnings	(182,000)
Balance at December 31, 2013	$ 663,000

	Warrant and Option Derivative Liabilities
Balance at December 31, 2012	$ 972,381
Total (gains) or losses for the period included in earnings	(687,582)
Balance at December 31, 2013	$ 284,799

Gains and losses included in earnings for the twelve months ended December 31, 2013 are reported as follows:

	Adjustment to Fair Value of Derivatives

Total gain included in earnings	$ 182,000

	Warrant and Option Derivative Liabilities
Total gain included in earnings	$ 687,582

The following table provides quantitative information about measurements categorized within Level 3 of the fair value hierarchy:

Description	Fair Value at December 31, 2013	Valuation Technique	Unobservable Input	Value
Embedded conversion option liability	663,000	Binomial Lattice Model	Expected volatility of the Company's common stock	57%
			Discount for illiquidity of large blocks of the Company's common stock	6.0% to 24.1%
			Discount rate for contractual debt principal and interest payments	20.0%

Description	Fair Value at December 31, 2013	Valuation Technique	Unobservable Input	Value
Warrant and Option derivative liabilities	284,799	Black Scholes Model	Expected volatility of the Company's common stock	55% - 150%

For the years ended December 31, 2013, 2012 and 2011 the Company recognized a gain of $493,241, $889,883, and $11,444,988, respectively, for the changes in the valuation of derivative liabilities.

The Company did not identify any non-recurring assets and liabilities that were recorded at fair value during the periods presented.

Revenue Recognition and Deferred Revenue — The Company’s revenues are primarily generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license.

License fee revenue begins to be recognized in the first full month following the effective date of the license agreement. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue.

Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

In some cases, the Company is entitled to receive royalty payments from licensees. In such cases, the Company recognizes the royalties when they are earned and collectability of those royalty payments is reasonably assured.

In connection with its license agreements, the Company recorded $224,985, $466,487, and $506,419 in license fee revenue for the years ended December 31, 2013, 2012 and 2011, respectively, in its consolidated statements of operations, and the remainder of the license fees have been accrued in deferred revenue at December 31, 2013 and 2012, respectively.

Research and Development Costs — Research and development costs consist of expenditures for the research and development of patents and technology, which cannot be capitalized. The Company's research and development costs consist mainly of payroll and payroll related expenses, research supplies and research grants. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval. Research and development costs are expensed as incurred.

Share-Based Compensation — The Company records stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation." ASC 718 requires companies to measure compensation cost for stock-based employee compensation at fair value at the grant date and recognize the expense over the employee's requisite service period. The Company recognizes in the statement of operations the grant-date fair value of stock options and other equity-based compensation issued to employees and non-employees. There were 118,278,611 options outstanding as of December 31, 2013.

Income Taxes — Deferred income taxes are provided using the liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of the changes in tax laws and rates of the date of enactment.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the balance sheets along with any associated interest and penalties that would be payable to the taxing authorities upon examination.

Applicable interest and penalties associated with unrecognized tax benefits are classified as additional income taxes in the statements of operations.

Net Loss Per Share — Net loss per share is calculated in accordance with the ASC 260-10, *"Earnings Per Share."* Basic net loss-per-share is based upon the weighted average number of common shares outstanding. Diluted net loss-per-share is based on the assumption that all dilutive convertible shares and stock options were converted or exercised. Dilution is computed by applying the treasury stock method. Under this method, options and warrants are assumed to be exercised at the beginning of the period (or at the time of issuance, if later), and as if funds obtained thereby were used to purchase common stock at the average market price during the period.

At December 31, 2013, 2012 and 2011, approximately 197,532,261, 235,989,033, and 119,000,000 potentially dilutive shares, respectively, were excluded from the shares used to calculate diluted net loss per share as their inclusion would be anti-dilutive.

Concentrations and Other Risks — Currently, the Company's revenues are concentrated from a small number of license arrangements. The following table shows the Company's concentrations of its revenue from those license arrangements comprising greater than 10% of total revenue for the years ended December 31, 2013, 2012 and 2011.

	Years Ended December 31,		
	2013	2012	2011
Exeter Life Sciences, Inc.	*	*	24%
START Licensing, Inc.	*	*	13%
International Stem Cell Corporation	25%	52%	15%
CHA Biotech and SCRMI	58%	28%	26%
Lifeline	*	14%	13%
Embryone Sciences	12%	*	*

*License revenue earned during the period was less than 10% of total license revenue.

Other risks include the uncertainty of the regulatory environment and the effect of future regulations on the Company's business activities. As the Company is a biotechnology research and development company, there is also the attendant risk that someone could commence legal proceedings over the Company's discoveries. Acts of God could also adversely affect the Company's business.

Recent Accounting Pronouncements

In July 2013, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2013-11, *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists* (ASU 2013-11). ASU 2013-11 clarifies guidance and eliminates diversity in practice on the presentation of unrecognized tax benefits when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists at the reporting date. This new guidance is effective on a prospective basis for fiscal years and interim reporting periods within those years, beginning after December 15, 2013. The adoption of ASU 2013-11 is not expected to have a material impact on consolidated results of operations, financial condition, or liquidity.

In February 2013, the FASB issued ASU No. 2013-02, *Comprehensive Income (Topic 220) – Reporting of Amounts Reclassified out of Accumulative Other Comprehensive Income* (ASU 2013-02), which replaces the presentation requirements for reclassifications out of accumulated other comprehensive income in ASU 2011-05 and ASU 2011-12. ASU 2013-02 requires an entity to provide information about the amounts reclassified out of accumulated other comprehensive income by component and to present significant amounts reclassified out of accumulated other comprehensive income by respective line items of net income if the amount reclassified is required to be reclassified to net income in its entirety. The adoption of this standard is not expected to have a material impact on consolidated results of operations, financial condition, or liquidity.

In July 2012, the FASB issued ASU 2012-02, *"Intangibles-Goodwill and Other (Topic 350): Testing Indefinite-Lived Intangible Assets for Impairment."* This ASU simplifies how entities test indefinite-lived intangible assets for impairment which improve consistency in impairment testing requirements among long-lived asset categories. These amended standards permit an assessment of qualitative factors to determine whether it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying value. For assets in which this assessment concludes it is more likely than not that the fair value is more than its carrying value, these amended standards eliminate the requirement to perform quantitative impairment testing as outlined in the previously issued standards. The guidance is effective for annual and interim impairment tests performed for fiscal years beginning after September 15, 2012, early adoption is permitted. The adoption of this standard did not have a material impact on the consolidated results of operations, financial condition, or liquidity.

In December 2011, the FASB issued ASU No. 2011-11, "*Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities*." This ASU requires an entity to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position. In January 2013, this guidance was amended by ASU 2013-01, "*Clarifying the Scope of Disclosure about Offsetting Assets and Liabilities,*" which limits the scope of ASU No. 2011-11 to certain derivatives, repurchase and reverse repurchase agreements, and securities borrowing and lending transactions. This guidance is effective for annual and interim reporting periods beginning on or after January 1, 2013. The adoption of this standard did not have a material impact on the consolidated results of operations, financial condition, or liquidity.

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4. INVESTMENT IN JOINT VENTURE

On December 1, 2008, the Company and CHA Bio & Diostech Co., Ltd. formed an international joint venture. The new company, Stem Cell & Regenerative Medicine International, Inc., or SCRMI, will develop human blood cells and other clinical therapies based on the Company's hemangioblast program, one of the Company's core technologies. Under the terms of the agreement, the Company purchased upfront a 33% interest in the joint venture, and will receive another 7% interest upon fulfilling certain obligations under the agreement over a period of 3 years. The Company's contribution includes (a) the uninterrupted use of a portion of its leased facility at the Company's expense, (b) the uninterrupted use of certain equipment in the leased facility, and (c) the release of certain of the Company's research and science personnel to be employed by the joint venture. In return, for a 60% interest, CHA has agreed to contribute $150,000 cash and to fund all operational costs in order to conduct the hemangioblast program. Effective May 1, 2010, the Company was no longer obligated to provide laboratory space to SCRMI, and the Company holds a 40% interest in the joint venture and CHA Bio & Diostech, Ltd. owns a 60% interest. The two partners to the joint venture are in negotiations on further funding of the joint venture, but there can be no assurances that an agreement will be reached. Any financial statement impact at this time is unclear should an agreement not be reached.

The Company has agreed to collaborate with the joint venture in securing grants to further research and development of its technology. Additionally, SCRMI has agreed to pay the Company a fee of $500,000 for an exclusive, worldwide license to the Hemangioblast Program. The Company recorded $29,412, $29,412 and $29,412 in license fee revenue for the years ended December 31, 2013, 2012 and 2011, respectively, in its accompanying consolidated statements of operations, and the balance of unamortized license fee of $351,715 and $381,127 is included in deferred revenue in the accompanying consolidated balance sheets at December 31, 2013 and 2012, respectively.

On July 15, 2011, the Company and CHA Biotech entered into a binding term sheet, with the expectation of entering into a future definitive agreement, in which the joint venture was realigned around both product development rights and research responsibilities. Under the terms of the binding term sheet, SCRMI exclusively licensed the rights to the Hemangioblast Program to the Company for United States and Canada and expanded the jurisdictional scope of the license to CHA Biotech to include Japan (in addition to South Korea, which was already exclusively licensed to CHA Biotech). As part of the agreement, the scientists at SCRMI involved in the Hemangioblast Program were transferred to the Company, and SCRMI discontinued its research activity and became solely a licensing entity. The Company is obligated to meet a minimal research spending requirement of $6.75 million by July 31, 2014 in order to maintain its exclusive license, up to the point of filing an investigational new drug for a therapeutic product. Intellectual property rights created by the Company in the course of our research are subject to a non-exclusive license to CHA Biotech for Japan and South Korea, and to SCRMI to be sub-licensable under certain circumstances for countries other than the United States, Canada, Japan and South Korea. Pursuant to the agreement, the Company paid $820,000 to SCRMI which is recorded to "losses attributable to equity method investments." By filing the investigational new animal drug application on September 12, 2013 with the Federal Drug Administration, the Company has met the commitment required to maintain its exclusive license.

The following table is a summary of key financial data for the joint venture as of and for the years ended December 31, 2013, 2012 and 2011:

	Years Ended December 31,		
	2013	2012	2011
Current assets	$268,124	$220,347	$194,349
Noncurrent assets	$1,333,201	$1,281,739	$1,082,778
Current liabilities	$292,770	$297,998	$294,469
Noncurrent liabilities	$1,875,554	$2,167,670	$2,459,785
Net revenue	$292,116	$292,116	$417,382
Net income (loss)	$396,583	$513,545	$(574,713)

5. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following at December 31, 2013 and 2012:

	Years Ended December 31,	
	2013	2012
Machinery & equipment (1)	$1,086,800	$907,740
Computer equipment	49,707	32,986
Office furniture	38,783	6,684
Leasehold improvements (1)	559,969	169,572
	1,735,259	1,116,982
Accumulated depreciation	(981,683)	(941,726)
Property and equipment, net	$753,576	$175,256

(1) The 2013 balances include approximately $125,000 in machinery & equipment and $339,000 in leasehold improvements that were not yet placed in service at December 31, 2013 and therefore had not started being depreciated as of that date.

Depreciation expense for the years ended December 31, 2013, 2012 and 2011 was $93,507, $58,637, and $67,161, respectively.

6. ACCRUED SETTLEMENT

	Years Ended December 31,	
	2013	2012
SEC civil action	$4,086,619	$–
CAMOFI Master LDC	–	6,807,891
	$4,086,619	$6,807,891

CAMOFI Master LDC

CAMOFI Master LDC and CAMZHN Master LDC (the "CAMOFI Parties") filed their Complaint on October 13, 2011. In their Complaint, the CAMOFI Parties argue that as a result of the transactions between the Company and JMJ, Gemini Master Fund, Ltd. and Midsummer Investment, Ltd. respectively, the exercise prices in their Warrants and debentures should have been reduced. Consequently, the CAMOFI Parties argue that they have been denied the right to receive, in total, at least 130,795,594 shares of the Company's common stock, which has allegedly resulted in losses to the CAMOFI Parties of at least $22,265,951.

On January 11, 2013, The Company entered into a settlement agreement and mutual release (the “Settlement Agreement”) with the CAMOFI Parties. The Settlement Agreement relates to the lawsuit between the CAMOFI Parties, as plaintiffs, and the Company, as defendant, in the Supreme Court of New York, New York County (the “Court”), docket number 652816/2011, in which the CAMOFI Parties claim that the conversion price of certain notes and the exercise price of certain warrants held by the Settling Parties should have been adjusted as a result of certain transactions between the Company and JMJ Financial, Inc. during 2010.

Pursuant to the Settlement Agreement, and subject to Court approval, the Company agreed, in exchange for dismissal of the pending lawsuit with prejudice and a mutual release of all claims, to do the following on the business day following approval by the Court of the settlement or on another day agreed upon by the parties to the settlement (the “Closing”):

- issue to the CAMOFI Parties an aggregate number of shares of the Company’s common stock calculated by dividing $4,500,000 by the least of (a) $0.056 per share, (b) the closing price of the common stock on the day immediately prior to the execution of the Settlement Agreement or (c) the volume-weighted average price (“VWAP”) reported by Bloomberg LP for the 30-day period before such shares of common stock are received (the “Closing Shares”), of which 78.9% of such Closing Shares will be issued to CAMOFI and 21.1% to CAMHZN;

- issue (a) to CAMOFI an Amortizing Senior Secured Convertible Debenture in the principal amount of $4,732,781 and (b) to CAMHZN an Amortizing Senior Secured Convertible Debenture in the original principal amount of $1,267,219 (together, the “Debentures”);

- pay $1,577,594 to CAMOFI and $422,406 to CAMHZN; and

- reimburse the CAMOFI Parties for certain of the CAMOFI Parties’ costs incurred in connection with the pending lawsuit.

Summary of CAMOFI accrual at December 31, 2012:	Share value	$4,500,000
	Cash Due	$2,000,000
	Costs reimbursed	$307,891
	Total CAMOFI	$6,807,891

The Debentures accrue interest at the rate of 8% per annum and mature on June 30, 2015. The Company may pre-pay all or a portion of the amounts due under the Debentures prior to maturity without penalty. Both of the Debentures are convertible at the option of the holder at a price per share of Common Stock equal to 80% of the volume weighted average price ("VWAP") of the ten consecutive trading days prior to the conversion date (the "Conversion Price"). The Company must make quarterly payments under the Debentures on the last day of each calendar quarter commencing on March 31, 2013 in the amount of $600,000. The quarterly payments may, at the option of the Company and subject to the satisfaction of certain conditions, be paid in shares of Common Stock. In such case, the conversion price for such payment will be based on the lesser of (i) the Conversion Price or (ii) 80% of the average of the 10 closing prices immediately prior to the date the quarterly payment is due. To secure its obligations under the Debentures, the Company will grant a security interest in substantially all of the Company's assets, including its intellectual property, to the Settling Parties. The Debentures contain certain covenants customary for debt instruments of its kind.

On January 22, 2013, the Supreme Court of New York approved the issuance of the shares of the Company's common stock that the Company agreed to issue to the CAMOFI Parties pursuant to the Settlement Agreement and Mutual Release that was entered into on January 11, 2013. Accordingly, on January 23, 2013, the Company issued an aggregate of 80,357,143 shares to the CAMOFI Parties as required by the Settlement Agreement and in reliance upon the exemption from registration under Section 3(a)(10) of the Securities Act of 1933, as amended.

Pursuant to the settlement agreement, the Company and CAMOFI entered into a registration rights agreement, which required the Company to register the shares of Common Stock into which the Debentures are convertible with the Securities and Exchange Commission. The registration rights agreement provides that the registration statement will be filed within thirty days of the execution of the registration rights agreement and that it becomes effective within sixty days or within 90 days in the event of a full review by the Securities and Exchange Commission. If the Company fails to file the registration statement within the required time period, then the Company will pay, in cash, partial liquidated damages equal to 1.5% of the original principal amount of the Debentures. If the Company fails to pay any partial liquidated damages with seven days after the date payable, the Company will pay interest thereon at a rate of 18% per annum. The Company filed the registration statement on February 21, 2013 which was within the required time period. As of December 31, 2013, the Company has not recorded a liability related to the registration rights agreement. (See Note 8 for further details).

Securities and Exchange Commission – Civil Action

In May 2012, the Company was named as a defendant in a civil action brought by the Securities and Exchange Commission related to transactions involving the sale and issuance of the Company's securities. The Securities and Exchange Commission alleges that Company violated Section 5(a) and 5(c) of the Securities Act of 1933 because certain sales of shares to outside organizations, completed in late 2008 and early 2009 under the Company's former management, resulted in $3.5 million in proceeds to the Company, were neither registered under the Securities act nor subject to an exemption from registration under Section 3(a)(10) of the Securities Act of 1933, as amended. In addition, the Company is alleged to have violated Section 13(a) of the Exchange Act of 1934 because the Company did not disclose the sale and issuance of the shares to the Securities and Exchange Commission on a timely basis. The Company expensed the $3.5 million as "fines and penalties" in the consolidated statement of operations and recorded the $3.5 million liability to "loss contingency accrual" in the consolidated balance sheet in 2012 and recorded an additional amount of approximately $586,619 in 2013, for a total accrual of $4,086,619 at December 31, 2013.

In December 2013, the Company settled the civil action. Under the terms of the settlement accepted by the SEC, the Company consented to entry of judgment under which it neither admits nor denies liability and has agreed to disgorgement of $3.5 million in proceeds from the transactions in question. In addition, the Company will pay approximately $587,000 in pre-judgment interest. The total amount due, approximately $4.1 million, will be paid over six equal quarterly installments. The first installment was placed into escrow in July 2013 and was applied immediately to the aggregate amount due. The next installment will be due in late April 2014. In addition, the settlement permanently restrains and enjoins the Company from violations of Sections 5(a) and 5(c) of the Securities Act, Section 13(a) of the Exchange Act and Rule 13a-11 under the Exchange Act. The settlement remains subject to court approval.

Midsummer Investment, Ltd

On August 9, 2011, the Company entered into a Settlement Agreement and Mutual Release, or Settlement Agreement, with Midsummer Investment, Ltd and Midsummer Small Cap Master, Ltd. (collectively, "Midsummer"). Pursuant to the Settlement Agreement, upon tender by Midsummer to the Company of warrants held by Midsummer to purchase a total of 20,319,730 shares of the Company's common stock (the "Warrants"), and duly executed notices of exercise (deemed to occur upon execution of the Settlement Agreement), the Company, to settle errors involving warrant issuances to Midsummer, agreed to (i) deliver to Midsummer an aggregate of 36,000,000 shares of the Company's common stock (the "Current Shares"), as an exercise of the Warrants in respect of a partial exercise of Warrants, (ii) undertake to issue 30,585,774 additional shares of the Company's common stock (the "Future Shares"), as an exercise of the remainder of the Warrants within ten days of the date that the Company shall have sufficient authorized and unissued shares of Common Stock ("Authorized Share Increase") which are not otherwise reserved for issuance for other purposes to enable the Company to issue all of the Future Shares and (iii) issue 3,058,577 shares of the Company's common stock (the "Additional Future Shares") for every calendar month elapsed between the date of delivery of the Current Shares and the date following delivery of the Future Shares. The Company and Midsummer provided mutual general releases.

The shares were valued at $0.17 which is the share price on the date of the agreement. Per the Settlement Agreement, the Company issued 36,000,000 shares on August 12, 2011 and issued the Future Shares of 30,585,774 and the Additional Future Shares of 15,292,885 on January 31, 2012.

No accrual was recorded at December 31, 2013 or 2012.

Alpha Capital

On or about September 16, 2011, Alpha Capital Anstalt ("Alpha Capital"), a Liechtenstein corporation with its principal place of business in Vaduz, Liechtenstein ("plaintiff"), filed an action against the Company in the United States District Court for the Southern District of New York, Case No. 11 CIV 6458. Plaintiff alleges that it is or was a holder of various convertible notes and warrants issued by the Company, and that by reason of certain transactions between the Company and JMJ Financial, Inc. during 2010, the exercise and conversion prices in plaintiff's convertible notes and warrants should have been reset. Plaintiff demands a preliminary and permanent injunction directing that the Company deliver to it at least 39,514,859 shares of its common stock, as well as monetary damages in an amount to be determined at trial.

On October 14, 2011, the United States District Court for the Southern District of New York entered an order granting plaintiff Alpha Capital's motion for a preliminary injunction and preliminary declaratory relief in the lawsuit entitled Alpha Capital Anstalt v. Advanced Cell Technology, Inc., Case No. 11 CIV 6458 (S.D.N.Y. filed Sept. 16, 2011). In its motion, Alpha Capital sought an order directing the Company to deliver to it at least 39,514,859 shares of its common stock in accordance with the terms of its warrants and convertible promissory notes. The court's October 14, 2011 order directed the Company to hold in escrow 39,514,859 shares of its common stock pending the entry of a preliminary injunction, and directed Alpha Capital to submit a proposed form of order to the court by October 27, 2011. On November 1, 2011, we issued the 39,514,859 shares to Alpha Capital.

On November 23, 2011, the Company answered Alpha Capital’s Complaint and asserted affirmative defenses. On December 12, 2011, the Company and Alpha submitted a Civil Case Management Plan and Scheduling Order.

On September 11, 2012, the Company entered into a settlement agreement (the “Settlement Agreement”) with Alpha Capital. Pursuant to the Settlement Agreement, and subject to Court approval, the Company agreed, in exchange for dismissal of the pending lawsuit with prejudice and a mutual release of all claims, to issue to Alpha Capital 34,285,714 shares of the Company’s common stock (the “Settlement Shares”) and pay $500,000 to Alpha Capital (the “Cash Consideration”).

Pursuant to the Settlement Agreement, the Company and Alpha Capital filed a joint application for a hearing to determine the fairness of the transactions contemplated by the Settlement Agreement. On September 13, 2012, the Court approved the Settlement Agreement, the issuance of the Settlement Shares and the Cash Consideration.

No accrual was recorded at December 31, 2013 or 2012.

Black Mountain Equities

On November 9, 2011, the United States District Court for the Southern District of New York entered an order granting plaintiff Black Mountain Equities, Inc. ("Black Mountain") motion for a preliminary injunction and preliminary declaratory relief in the lawsuit entitled *Black Mountain Equities, Inc., v. Advanced Cell Technology, Inc.*, Case No. 11 CIV 7305, filed on October 17, 2011. In its motion, Black Mountain sought an order directing the Company to deliver to it at least 18,000,000 shares of its common stock in accordance with the terms of its warrants and convertible promissory notes. The court's November 9, 2011 order directed the Company to hold in escrow 18,000,000 shares of its common stock pending the entry of a preliminary injunction.

On November 15, 2011, the Company issued and held in escrow the 18,000,000 shares. On December 15, 2011, the Company answered BME's initial Complaint and asserted counterclaims, disputing BME's contention that it was owed 18,000,000 shares. On December 29, 2011, BME filed an Amended Complaint. On January 17, 2012, the Company answered the Amended Complaint and asserted revised counterclaims. On April 9, 2012, the Company settled by agreeing to release 18,000,000 shares of common stock held in escrow and issuing an additional 800,000 shares of common stock, which were issued on May 8, 2012. On May 4, 2012, the Court approved the settlement, and the action was dismissed with prejudice.

No accrual was recorded at December 31, 2013 or 2012.

Cranshire Master Fund

On December 15, 2011, the United States District Court for the Southern District of New York entered an order granting plaintiff Cranshire Capital Master Fund, Ltd.'s ("Cranshire") motion for a preliminary injunction in the lawsuit entitled *Cranshire Capital Master Fund, Ltd. v. Advanced Cell Technology, Inc.*, Case No. 11 CIV 8755 (S.D.N.Y. filed December 1, 2011). Cranshire asserts that as a result of the transactions between the Company and JMJ, the exercise price of its warrants should have been decreased to $.0353 and the total number of warrant shares issuable upon exercise should have been increased from 6,918,197 to 19,598,292. Based upon these figures, Cranshire asserted that its December 2010 warrant exercise should have resulted in an additional 12,680,094 shares. Cranshire asserts claims for damages, in an amount to be determined at trial, for the Company's alleged failure to deliver the shares and to provide proper notice of reduction in exercise price and conversion price. On December 2, 2011, Cranshire moved for preliminary declaratory relief and for a preliminary injunction directing the Company to deliver immediately at least 12,680,094 shares of its common stock to Cranshire. At the hearing on December 15, 2011, Cranshire changed its argument, contending that the exercise price should have been decreased to $.027 (as opposed to $.0353) and that, consequently, it was entitled to 18,000,000 shares (as opposed to 12,660,094 shares).On December 15, 2011, the court granted a preliminary injunction and directed the Company to deliver to Cranshire 10,730,265 shares of the Company's common stock.

The Company issued the 10,730,265 shares to Cranshire on December 16, 2011. On February 24, 2012, the Company entered into an agreement with Cranshire to settle all outstanding claims against the Company. Pursuant to the agreement, the Company issued to Cranshire (1) an additional 1,949,735 of common stock, (2) plus the quotient of (x) $276,000 divided by (y) 90% of the closing price of common stock on the trading day immediately preceding the entry of the court order. The number of shares of common stock issued based on a $0.11 share price at February 24, 2012 was 4,941,605. On March 8, 2012, the Court approved the exchange agreement entered into on February 24, 2012 and the action was dismissed with prejudice.

No accrual was recorded at December 31, 2013 or 2012.

Global Settlement

On December 7, 2011, the Company entered into settlement agreements with 40 holders of convertible promissory notes and warrants that were issued between 2005 and 2010. The settlement agreements relate to claims that the holders may have against the Company regarding the assertion that the conversion price of the notes and the exercise price of the warrants should have been adjusted as a result of certain transactions between the Company and JMJ Financial, Inc. during 2010. Pursuant to the settlement agreements, the Company agreed to issue an aggregate of 239,601,630 shares of common stock to the settling holders.

At the time of settlement, the Company did not have a sufficient number of authorized but unissued shares of common stock to issue all of the shares of common stock that the Company agreed to issue to settling holders pursuant to the settlement agreements. On January 24, 2012, the Company’s shareholders approved the increase in authorized shares to 2,750,000,000. The Company issued 238,237,459 shares on January 31, 2012 and 1,364,171 shares on February 7, 2012.

No accrual was recorded at December 31, 2013 or 2012.

7. LOSS CONTINGENCY ACCRUAL

	Years Ended December 31,	
	2013	2012
Warrant holder litigation	$6,228,621	$–
SEC civil action	–	3,500,000
Miscellaneous settlements	203,358	170,287
	$6,431,979	$3,670,287

Warrant holder litigation

In connection with the unsettled warrant obligation (see Note 9) the holder has filed numerous lawsuits and in 2011 made a claim for approximately $28 million. In evaluating the need for a loss contingency accrual relating to the associated litigation, the Company determined that a loss was probable and the amount of loss was reasonably estimable, based on the facts and circumstances surrounding the litigation during the last quarter of 2013. The loss contingency represents the estimated number of shares to settle above a determined share amount necessary to settle the warrant share obligation plus an additional amount for potential interest charges.

While the Company believes it has meritorious defenses against the litigation, the ultimate resolution of the matter could result in a loss of up to approximately $25 million in excess of the amount currently accrued.

SEC civil action

The potential loss in this SEC matter was recorded as a loss contingency in 2012 and reclassified to accrued settlement in 2013 (see Note 6).

Miscellaneous settlements

The Company was not able to reach settlement agreements with all of holders of convertible promissory notes and warrants that were issued between 2005 and 2010. The Company has not been contacted by the remaining holders nor has it been able to reach them for potential settlement discussions. The holders in questions held warrants which expire in June 2014. If the Company is able to negotiate with the holders it anticipates that the number of shares to be issued will be similar to the settlements that have already been finalized as of December 31, 2012.

8. CONVERTIBLE PROMISSORY NOTES

2010 JMJ Convertible Promissory Notes

During 2010, the Company issued three convertible promissory notes to JMJ Financial, for a total of $3,000,000 available to receive in cash, for a principal sum of $3,850,000, which included an original issue discount of $850,000. The notes bear a one-time interest charge of 10% on the principal sum. The holder may at its election convert all or part of these notes into shares of the Company's common stock at the conversion rate of the lesser of: (a) $0.10 per share, or (b) 85% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. During 2010, the Company received the entire $3,000,000 on these notes. Of the $3,850,000 borrowed, the Company converted $3,562,215 into 76,465,706 shares of common stock during 2010.

On May 31, 2013, the Company and JMJ entered into a Mutual Release and Waiver Agreement (“Waiver Agreement”) whereby JMJ released and discharged the Company from any and all claims connected with the JMJ convertible promissory notes. At the date of the Waiver Agreement, the convertible promissory note balance was $287,785 and the conversion option liability associated with the convertible promissory note had a fair value of $150,802. The value was determined using the Black-Scholes model with the following assumptions: (1) dividend yield of 0%; (2) expected volatility of 80%, (3) risk-free interest rate of 0.04%, and (4) expected life of 0.001 years. The Company recorded a gain on extinguishment of debt of $438,587.

As of December 31, 2013 and December 31, 2012 the outstanding balance of the JMJ Convertible Promissory Notes was $0, and $287,785, respectively.

The fair value of the embedded conversion option was $0 and $122,668 as of December 31, 2013 and 2012, respectively. The decrease in the fair value of this liability was $28,134, $104,878 and $401,372 during the years ended December 31, 2013, 2012 and 2011, respectively, which was recorded through the statements of operations as an adjustment to fair value of derivatives.

Interest expense from amortization of debt discounts related to the JMJ Convertible Promissory Notes for the years ended December 31, 2013, 2012 and 2011 was $30,935, $127,207 and $126,863, respectively.

CAMOFI Master LDC Amortizing Secured Convertible Debenture

On January 11, 2013, the Company entered into a Settlement Agreement Mutual Release with the CAMOFI Parties. Pursuant to the Settlement Agreement, the Company issued Debentures in the principal amount of $4,732,781 and 1,267,219 to CAMOFI and CAMHZN, respectively. The Debentures have an effective date of December 31, 2012, accrue interest at the rate of 8% per annum and mature on June 30, 2015. The Company may pre-pay all or a portion of the amounts due under the Debentures prior to maturity without penalty. Both of the Debentures are convertible at the option of the holder at a price per share of common stock equal to 80% of the VWAP of the ten consecutive trading days prior to the conversion date. The Company must make quarterly payments under the Debentures on the last day of each calendar quarter commencing on March 31, 2013 in the amount of $600,000. The quarterly payments may, at the option of the Company and subject to the satisfaction of certain conditions, be paid in shares of Common Stock. In such case, the conversion price for such payment will be based on the lesser of (i) the conversion price as defined in the agreement or (ii) 80% of the average of the 10 closing prices immediately prior to the date the quarterly payment is due. To secure its obligations under the Debentures, the Company granted a security interest in substantially all of the Company’s assets, including its intellectual property, to the CAMOFI Parties. The Debentures contain certain covenants customary for debt instruments of its kind. At December 31, 2013 the Company was in compliance with the covenants of the Debentures.

The payment due on March 31, 2013, for $600,000 was paid in cash by the Company on April 1, 2013. The Company received two conversion notices dated May 30, 2013 and May 31, 2013 for $600,000 each. The Company issued 10,135,287 shares of its common stock for the May 30, 2013 conversion notice which was consideration for the June 2013 installment and issued 9,790,976 shares of its common stock for the May 31, 2013 conversion notice, which was consideration for the September 30, 2013 installment. The Company, at its option per the agreement, issued 11,881,189 shares of its common stock for the December 31, 2013 installment.

As of December 31, 2013, the redemption dates and amounts outstanding are as follows:

Redemption Date	Amount
3/31/2014	600,000
6/30/2014	600,000
9/30/2014	600,000
12/31/2014	600,000
3/31/2015	600,000
6/30/2015	600,000
	$3,600,000

The Company determined that the Debentures contained an embedded beneficial conversion feature as the Debentures are convertible at a price per share of common stock equal to 80% of the VWAP of the ten consecutive trading days prior to the conversion date. The Debentures and the embedded beneficial conversion feature were modeled using a lattice model. The Debenture was valued at a risk-adjusted rate resulting in a value at December 31, 2013 and 2012 of $3,337,123 and $5,275,000, respectively and the fair value of the embedded beneficial conversion feature at December 31, 2013 and 2012 was valued at $663,000 and $845,000, respectively. The Company recorded a gain of $182,000 for the change in the fair value of the embedded conversion option liability for the year ended December 31, 2013

At December 31, 2013, the Debentures could be converted into 71,423,767 shares of common stock based on a conversion price of $0.063.

The Company recorded a debt discount of $725,000, which will be amortized over the life of the note using the effective interest rate of 16.35%. For the years ended December 31, 2013 and 2012, the Company amortized $462,123 and $0, respectively, of the debt discount and recorded it as interest expense. The unamortized discount at December 31, 2013 and December 31, 2012 was $262,877 and $725,000, respectively. The Company recorded interest expense of $388,000 for the year ended December 31, 2013 based on the contractual interest rate.

9. Unsettled Warrant Obligation

The Company determined that it has an unsettled warrant obligation related to two warrant agreements entered into in 2005. The warrant agreement had anti-dilution ratchet provisions which the Company determined led to a contractual obligation, which became fixed on January 15, 2009, to issue approximately 63.2 million common shares. The Company further determined that those common shares represent a liability which should be recorded at fair value at each accounting period with changes to that fair value being recorded in earnings. Fair value is based on the share obligation multiplied by the stock price at the end of each reporting period, with a liability “floor” established, at $0.06 per share, based on the stock price at the time the ratchet provision was triggered. At December 31, 2013 and 2012 the liability has been recorded at $3,899,391 and $3,791,953, respectively. (See Note 2 “Restatement of Previously Issued Financial Statements” of Notes to Consolidated Financial Statements).

10. Series A-1 REDEEMABLE Convertible Preferred Stock

On March 3, 2009, the Company entered into a $5 million credit facility (“Facility”) with Volation. Under the terms of the agreement, the Company may draw down funds, as needed, from the investor through the issuance of Series A-1 redeemable convertible preferred stock, par value $.001, at a basis of 1 share of Series A-1 redeemable convertible preferred stock for every $10,000 invested. The preferred stock pays dividends, in kind of preferred stock, at an annual

rate of 10%, matures in four years from the initial drawdown date, and is convertible into common stock at $0.75 per share at the option of the holder.

However, in the event the closing price of the common stock during the 5 trading days following the notice to convert falls below 75% of the average of the closing bid price in the 5 trading days prior to the closing date, the investor may, at its option, and without penalty, decline to purchase the applicable put shares on the closing date.

The Company is required to keep available out of its authorized but unissued shares of common stock, such number of shares sufficient to effect a conversion of all then outstanding shares of the Series A-1 redeemable convertible preferred stock.

Modification of Series A-1 Convertible Redeemable Preferred Stock:

On October 19, 2009, the Company entered into two letter agreements with Volation, pursuant to which (i) the Company reduced the conversion price of its existing outstanding Series A-1 redeemable convertible preferred stock issued to Volation to $0.10 per share resulting in 22,880,000 shares of common stock upon conversion, (ii) the Company issued Volation 2,500,000 shares of its common stock at $0.10 per share in payment of an outstanding commitment fee, and (iii) Volation waived the delinquency in non-payment of the $250,000 commitment fee required pursuant to the preferred stock purchase agreement between the Company and Volation. The commitment fee was paid during the year ended December 31, 2010 by reducing the proceeds paid by the Series A-1 Preferred Stock investors by the amount of the commitment fee.

The Series A-1 redeemable convertible preferred stock has been classified within the mezzanine section between liabilities and equity in the consolidated balance sheets because it is considered conditionally redeemable. The embedded conversion option has been recorded as a derivative liability in the Company's consolidated balance sheets, and changes in the fair value each reporting period are reported in adjustments to fair value of derivatives in the consolidated statements of operations.

On April 25, 2013, the Company entered into a share exchange agreement with Volation to exchange 27,522,833 freely tradeable shares of the Company's common stock for Volation's 113 shares of Series A-1 redeemable convertible preferred stock and accrued dividends at a negotiated conversion price was $0.06. At the date of the exchange agreement, the Company had principal and accrued dividends outstanding of $1,651,370. The Company recorded a finance cost of $261,467 for the difference between the fair value of the shares exchanged and the $1,651,370.

The following table summarizes the Series A-1 redeemable convertible preferred stock outstanding at December 31, 2013 and 2012:

	December 31, 2013	December 31, 2012
Principal due	$ –	$1,130,165
Accrued dividend	–	477,332
Debt discount	–	(8,964)
	–	1,598,533
Non-current portion	$ –	$1,598,533
Aggregate liquidation value*	$ –	$1,607,497

* Represents the sum of principal due and accrued dividends.

The dividends are accrued at a rate of 10% per annum, and the Company records the accrual as interest expense in its consolidated statements of operations in the period incurred. The Company recorded accrued dividends on the Series A-1 redeemable convertible preferred stock of $43,873, $135,235 and $122,605 for the years ended December 31, 2013, 2012, and 2011, respectively, which is recorded as interest expense in the consolidated statements of operations.

Conversion Option:

The embedded conversion option was valued at $0 and $33 at December 31, 2013 and 2012, respectively, at fair value using the Black-Scholes model. The decrease in the fair value of the embedded conversion option liability of $33, $25,950 and $186,464 for the years ended December 31, 2013, 2012 and 2011, respectively, was recorded through the statements of operations as an adjustment to fair value of derivatives.

Commitment fee and expenses

As compensation for investor relations services in connection with the Series A-1 redeemable convertible preferred stock credit facility, the Company issued a consultant 24,900,000 shares of its common stock on February 9, 2009. The Company valued the issuance of these shares at $4,731,000 based on a closing price of $0.19 on February 9, 2009 and recorded the value of the shares as deferred financing costs on the date they were issued. Beginning on the date of the first draw-down on April 6, 2009 (the loan maturity date is 4 years after the initial draw-down), the Company amortizes these fees over the term of the Series A-1 redeemable convertible preferred stock facility which represents the implied term of the investor relations contract.

The Company also incurred a non-refundable commitment fee to the holder of this convertible preferred stock facility in the amount of $250,000. The initial fee went into delinquency and was modified on October 19, 2009. (See modification section in the footnote below.)

Beginning on the date of the first draw-down on April 6, 2009 (the loan maturity date is 4 years after the initial draw-down), the Company amortizes the deferred issuance costs ratably over the term of the Series A-1 redeemable convertible preferred stock facility.

Interest expense from amortization of the debt discount and deferred costs for the years ended December 31, 2013, 2012 and 2011 was $117,180, $446,741 and $445,521, respectively.

11. SERIES B PREFERRED STOCK

On November 2, 2009 (“Effective Date”), the Company entered into a preferred stock purchase agreement with Optimus Life Sciences Capital Partners, LLC (“Investor” or “Optimus”). Pursuant to the purchase agreement, the Company agreed to sell, and the Investor agreed to purchase, in one or more purchases from time to time at the Company’s sole discretion, (i) up to 1,000 shares of Series B preferred stock at a purchase price of $10,000 per share, for an aggregate purchase price of up to $10,000,000, and (ii) five-year warrants to purchase shares of the Company’s common stock with an aggregate exercise price equal to 135% of the purchase price paid by the Investor, at an exercise price per share as follows:

On the sixth (6th) Trading Day following the Tranche Notice Date, the Exercise Price of the Optimus Warrant shall be adjusted to equal the VWAP for the 5 trading days beginning on and including the Tranche Notice Date (as so adjusted, the “Adjusted Exercise Price”); and

If the Adjusted Exercise Price results in additional Warrant Shares being issuable to the Holder, such additional shares shall be delivered to the Holder within one Trading Day following the Adjustment Date. If the Adjusted Exercise Price results in less Warrant Shares being issuable to the Holder, the excess Warrant Shares shall be returned by the Holder to the Company within one Trading Day following on the Adjustment Date.

The Company agreed to pay to the Investor a commitment fee of $500,000, at the earlier of the closing of the first Tranche or the six month anniversary of the effective date, payable at the Company’s election in cash or common stock valued at 90% of the volume weighted average price of the Company’s common stock on the five trading days preceding the payment date. The $500,000 commitment fee was outstanding and was recorded in accrued expenses in the Company’s consolidated balance sheet at December 31, 2009. During 2010, the Company issued 50 shares of preferred stock as payment for the commitment fee.

During 2010, the Company delivered tranche notices to Optimus Life Sciences Capital Partners, LLC for delivery of a total of 1,000 shares under the Series B preferred stock for funding in the amount of $10,000,000 ($9,485,000 in cash proceeds, $500,000 of commitment fee applied, and $15,000 in legal fees).

During 2010, in connection with the funding, the Company issued 95,870,362 shares of its common stock upon exercise of the same number of warrants, which were granted simultaneously with the Company's tranche notices. During 2010, the Company received secured promissory notes in the amount of $13,500,000 to settle the warrant exercise.

Dividends

Commencing on the date of the issuance of any shares of Series B preferred stock, Holders of Series B preferred stock will be entitled to receive dividends on each outstanding share of Series B preferred stock, which will accrue in shares of Series B preferred stock at a rate equal to 10% per annum from the issuance date compounded annually. Accrued dividends will be payable upon redemption of the Series B preferred stock. Accrued dividends were $3,587,748 and $2,352,321 at December 31, 2013 and 2012, respectively.

Redemption Rights

Upon or after the fourth anniversary of the initial issuance date, the Company will have the right, at the Company's option, to redeem all or a portion of the shares of the Series B preferred stock, at a price per share equal to 100% of the Series B liquidation value. The preferred stock may be redeemed at the Company's option, commencing 4 years from the issuance date at a price per share of (a) $10,000 per share plus accrued but unpaid dividends (the "Series B Liquidation Value"), or, at a price per share of: (x) 127% of the Series B Liquidation Value if redeemed on or after the first anniversary but prior to the second anniversary of the initial issuance date, (y) 118% of the Series B Liquidation Value if redeemed on or after the second anniversary but prior to the third anniversary of the initial issuance date, and (z) 109% of the Series B Liquidation Value if redeemed on or after the third anniversary but prior to the fourth anniversary of the initial issuance date.

Liquidation Rights

The preferred shares shall, with respect to dividend, rights upon liquidation, winding-up or dissolution, rank: (i) senior to the Company's common stock, and any other class or series of preferred stock of the Company, except Series A-1 Convertible Preferred Stock which shall rank senior in right of liquidation and *pari passu* with respect to dividends; and (ii) junior to all existing and future indebtedness of the Company.

If the Company determines to liquidate, dissolve or wind-up its business, it must redeem the Series B preferred stock at the prices set forth above. Upon any liquidation, dissolution or winding up of the Company the Holders of Series B preferred stock shall be first entitled to be paid out of the assets of the Company available for distribution to its stockholders an amount with respect to each share of Series B preferred stock equal to $10,000, plus any accrued and unpaid dividends.

The Company has classified the Series B redeemable preferred stock in the equity section in its consolidated balance sheets.

Related Secured Promissory Notes Receivable:

In accordance with the terms of the Series B preferred stock agreement, Optimus issued to the Company a secured promissory note in consideration for receiving warrants under each tranche. The value of each secured promissory note equals the value of the warrants that Optimus received. Interest on the notes accrues at 2% per year, compounding annually if the interest remains unpaid at the end of each year. The note is secured by freely tradable marketable securities belonging to Optimus. Each promissory note matures on the fourth anniversary of its issuance.

In the event the Company redeems all or a portion of any shares of Series B preferred stock held by Optimus, the Company will be permitted to offset the full amount of such proceeds against amounts outstanding under the

promissory notes. Accordingly, the Company included the discounted value of the secured promissory notes as a separate component of stockholders' deficit at December 31, 2013 and 2012.

The value of the secured promissory notes in the consolidated balance sheet was $13,561,607 net of discounts of $654,559 and accrued interest of $716,166 at December 31, 2013, reflecting a face value of $13,500,000. The value of the secured promissory notes in the consolidated balance sheet was $12,328,558, net of discounts of $1,641,001 and accrued interest of $469,559 at December 31, 2012, also reflecting a face value of $13,500,000. The Company determined that a 10% discount is appropriate, in order to consistently reflect the Company's cost of borrowing under the terms of the underlying Series B preferred stock that permits offset. The Company recorded an initial discount on the promissory notes in the amount of $3,519,238 during the year ended December 31, 2010. The Company accretes interest at 10% over the respective four-year terms of the promissory notes.

During the years ended December 31, 2013, 2012 and 2011 the Company accreted interest on the promissory notes in the amount of $1,233,050 $1,120,623 and $1,227,173 respectively, which was recorded in accumulated deficit during the periods then ended. The Company recorded dividends on its Series B preferred stock during the years ended December 31, 2013, 2012 and 2011 of $1,235,427, 1,122,783 and $1,229,538 respectively. The accrued dividends are offset by the accretion of the note receivable discount.

As of December 31, 2013 and 2012, 1,000 shares of Series B preferred stock were outstanding. As of December 31, 2013, the Company has drawn the entire commitment of $10,000,000.

Below is a table showing the net settlement amount at December 31, 2013 and December 31, 2012:

	December 31, 2013	December 31, 2012
Face Value of Preferred Stock	$10,000,000	$10,000,000
Accrued Dividends	$3,587,748	$2,352,321
Redemption factor	109%	118%
Conversion price	$14,810,645	$14,575,739
Receivable	$14,216,166	$13,969,559
Net settlement upon conversion	$594,479	$606,180

12. SERIES C PREFERRED STOCK

On December 30, 2010 (the "Series C Effective Date"), the Company entered into a securities purchase agreement (the "Series C Purchase Agreement") with Socius CG II, Ltd., a Bermuda exempted company ("Socius"). Pursuant to the Series C Purchase Agreement:

- The Company agreed to sell, and Socius agreed to purchase, in one or more purchases from time to time (each such purchase, a "Series C Tranche") in the Company's sole discretion (subject to the conditions set forth therein), (i) up to 2,500 shares of Series C Preferred Stock (the "Series C Preferred Shares") at a purchase price of $10,000 per share, for an aggregate purchase price of up to $25,000,000, and (ii) a two-year warrant (the "Socius Warrant") obligating Socius to purchase shares of the Company's common stock (the "Common Stock") with an aggregate exercise price equal to 20% of the purchase price paid by Socius for the Series C Preferred Shares sold in each Series C Tranche, at an exercise price per share equal to the closing bid price of the Company's Common Stock on the date the Company provides notice of such Series C Tranche (the "Series C Tranche Notice"). On each date that the Company delivers a Series C Tranche Notice to Socius, Socius shall also become obligated, pursuant to a right automatically vesting on such Series C Tranche Notice date, to purchase that number of shares of Common Stock (such shares of Common Stock the "Additional Investment Shares") equal in dollar amount to 100% of the Series C Tranche amount set forth in the Series C Tranche Notice at a price per share equal to the closing bid price of the Common Stock on the Series C Tranche Notice date.

- The Series C Purchase Agreement requires that, when the Company requests Socius to purchase a tranche of Series C Preferred Shares, the mandatory purchase by Socius of the related Additional Investment Shares must occur no later

than sixty (60) calendar days following the Series C Tranche Notice date.

The Socius Warrant was issued to Socius on December 30, 2010 (the “Closing Date”) simultaneous with entering into the Series C Purchase Agreement. The Socius Warrant was issued with an initial exercise price per warrant is of $0.16 per share and for a total of up to 31,250,000 shares, subject to adjustment as described therein. On January 10, 2011, Socius and the Company entered into a letter agreement in which the parties agreed that, following arms-length negotiations and notwithstanding anything to the contrary in the Socius Warrant, that the initial number of shares issuable under the Socius Warrant, subject to the adjustment mechanism set forth therein, was equal to 30,000,000.

As required by the Purchase Agreement, the Socius Warrant must be exercised for such number of shares of Common Stock equal in amount to 20% of the cumulative purchase price paid by Socius for the Series C Preferred Shares. The maximum amount of Series C Preferred Stock that Socius may become obligated to purchase under all Series C Tranches is $25,000,000. Assuming the maximum drawdown of $25,000,000 by the Company under the Series C Purchase Agreement, Socius would be required to exercise the Socius Warrant to purchase 20% of this total dollar amount, or $5,000,000 worth of shares of Common Stock.

The Letter Agreement, entered into on January 10, 2011, modified the Socius Warrant only with respect to the initial number of underlying shares and expressly provides that, except as so modified, the Socius Warrant shall remain unchanged and shall continue in full force and effect.

- At the initial closing pursuant to the Series C Purchase Agreement, which occurred on the Closing Date, (i) Socius purchased 400 Preferred Shares and the Company received gross proceeds of $4,000,000 (ii) the Company delivered to Socius an initial warrant (the "Initial Warrant") obligating Socius to purchase shares of Common Stock with an aggregate purchase price of $800,000, which shall be automatically exercisable on the date a registration statement for the resale of all shares of Common Stock issuable pursuant to the Series C Purchase Agreement is declared effective (which effectiveness occurred on April 13, 2011), with delivery of such shares made to Socius on the trading day immediately following the exercise date at a per-share price equal to the closing bid price of the Common Stock on the delivery date, and (iii) Socius became obligated to purchase additional shares of Common Stock equal in aggregate dollar amount to $4,000,000 (such shares of Common Stock the "Initial Investment Shares"), with delivery of such shares made to Socius on the trading day immediately following the date the registration statement is declared effective at a price per share equal to the closing bid price of Common Stock on the delivery date.

- The Company agreed to pay to Socius a commitment fee of $1,250,000 (the "Commitment Fee"), at the earlier of the closing of the first Series C Tranche or the six month anniversary of the Series C Effective Date. This Commitment Fee is payable solely at the Company's election, in cash or in the alternative, in shares of common stock valued at 88% of the volume weighted average price of the Company's Common Stock on the five trading days preceding the payment date. If the Company elects to pay the Commitment Fee in shares of Common Stock, no cash payment would be due as the issuance of shares would satisfy the Commitment Fee obligation in full. The Company issued 7,562,008 shares of common stock on September 30, 2011 as full payment of the commitment fee.

- The Company agreed to use its best efforts to file within 60 days of the Series C Effective Date, and cause to become effective as soon as possible thereafter, a registration statement with the Securities and Exchange Commission for the resale of all shares of Common Stock issuable pursuant to the Series C Purchase Agreement, including the shares of Common Stock underlying the Socius Warrant, shares of the Common Stock issuable upon exercise of the Initial Warrant, shares of Common Stock issuable as Initial Investment Shares, shares of Common Stock issuable as Additional Investment Shares, and shares of Common Stock issuable in payment of the Commitment Fee.

- In the event that Socius does not comply with its obligations under the Series C Purchase Agreement (including its obligations to exercise the Socius Warrant), the Series C Purchase Agreement provides that, in addition to being entitled to exercise all rights provided therein or granted by law, the Company would be entitled to seek specific performance by Socius under the Series C Purchase Agreement and the Socius Warrant.

On December 30, 2010, in accordance with the purchase agreement, the Company filed a certificate of designations for the Series C preferred stock with the Secretary of State of the state of Delaware. As previously reported, pursuant to the Certificate of Designations, the preferred shares shall, with respect to dividend, rights upon liquidation, winding-up or dissolution, rank: (i) senior to the Company's common stock, and any other class or series of preferred stock of the Company (collectively, with any warrants, rights, calls or options exercisable for or convertible into such preferred stock, the "Junior Securities"); provided, however, the Series A-1 convertible preferred stock and Series B preferred stock (together, the "Senior Securities") shall rank senior in right of redemption, liquidation, and dividends; and (ii) junior to all existing and future indebtedness of the Company.

On June 16, 2011, the Company delivered the second Series C Tranche notice to Socius for delivery of a total of 400 shares under the Series C preferred stock for funding in the amount of $4,000,000.

On September 22, 2011, the Company delivered the third Series C Tranche notice to Socius for delivery of a total of 150 shares under the Series C preferred stock for funding in the amount of $1,500,000.

On December 15, 2011, the Company delivered the fourth Series C Tranche notice to Socius for delivery of a total of 200 shares under the Series C preferred stock for funding in the amount of $2,000,000.

On March 21, 2012, the Company delivered the fifth Series C Tranche notice to Socius for delivery of a total of 250 shares under the Series C preferred stock for funding in the amount of $2,500,000.

On June 20, 2012, the Company delivered the sixth Series C Tranche notice to Socius for delivery of a total of 200 shares under the Series C preferred stock for funding in the amount of $2,000,000.

On September 21, 2012, the Company delivered the seventh Series C Tranche notice to Socius for delivery of a total of 150 shares under the Series C preferred stock for funding in the amount of $1,500,000.

As of December 31, 2013, the Company has drawn $17,500,000 of the $25,000,000 commitment.

Dividends

Commencing on the date of the issuance of any shares of Series C preferred stock, holders of Series C preferred stock will be entitled to receive dividends on each outstanding share of Series C preferred stock, which will accrue in shares of Series C preferred stock at a rate equal to 6% per annum from the issuance date compounded annually. Accrued dividends will be payable upon redemption of the Series C preferred stock. Accrued dividends were $2,454,853 and $1,325,333 at December 31, 2013 and 2012, respectively.

Redemption Rights

Upon or after the fourth anniversary of the initial issuance date, the Company will have the right, at the Company's option, to redeem all or a portion of the shares of the Series C preferred stock, at a price per share equal to 100% of the Series C liquidation value. The preferred stock may be redeemed at the Company's option, commencing 4 years from the issuance date at a price per share of (a) $10,000 per share plus accrued but unpaid dividends (the "Series C Liquidation Value"), or, at a price per share of : (i) 136% of the Series C Liquidation Value if redeemed prior to the first anniversary of the initial issuance date, (ii) 127% of the Series C Liquidation Value if redeemed on or after the first anniversary but prior to the second anniversary of the initial issuance date, (iii) 118% of the Series C Liquidation Value if redeemed on or after the second anniversary but prior to the third anniversary of the initial issuance date, and (iv) 109% of the Series C Liquidation Value if redeemed on or after the third anniversary but prior to the fourth anniversary of the initial issuance date.

Termination and Liquidation Rights

If the Company determines to liquidate, dissolve or wind-up its business, it must redeem the Series C preferred stock at the prices set forth above. Upon any liquidation, dissolution or winding up of the Company, the Holders of Series C preferred stock shall be first entitled to be paid out of the assets of the Company available for distribution to its stockholders an amount with respect to each share of Series C preferred stock equal to $10,000, plus any accrued and unpaid dividends.

Related Secured Promissory Notes Receivable:

In accordance with the terms of the Series C preferred stock agreement, the Company issued the following notes receivable:

- On April 14, 2011 and associated with the first Series C Tranche notice which occurred on December 31, 2010, Socius issued to the Company a secured promissory note of $4,000,000 for 22,222,222 shares of common stock and issued a secured promissory note of $800,000 for the exercise of warrants for 4,444,444 shares of common stock.

- On June 16, 2011 and associated with the second Series C Tranche notice, Socius issued to the Company a secured promissory note of $4,000,000 for 21,390,374 shares of common stock and issued a secured promissory note of $800,000 for the exercise of warrants for 4,278,075 shares of common stock.

- On September 22, 2011 and associated with the third Series C Tranche notice, Socius issued to the Company a secured promissory note of $1,500,000 for 9,671,180 shares of common stock and issued a secured promissory note of $300,000 for the exercise of warrants for 1,934,236 shares of common stock.

- On December 15, 2011 and associated with the fourth Series C Tranche notice, Socius issued to the Company a secured promissory note of $2,000,000 for 20,512,821 shares of common stock and issued a secured promissory note of $400,000 for the exercise of warrants for 4,102,564 shares of common stock.

- On March 21, 2012 and associated with the fifth Series C Tranche notice, Socius issued to the Company a secured promissory note of $2,500,000 for 26,315,789 shares of common stock and issued a secured promissory note of $500,000 for the exercise of warrants for 5,263,158 shares of common stock.

- On June 20, 2012 and associated with the sixth Series C Tranche notice, Socius issued to the Company a secured promissory note of $2,000,000 for 28,490,028 shares of common stock and issued a secured promissory note of $400,000 for the exercise of warrants for 5,698,006 shares of common stock.

- On September 21, 2012 and associated with the seventh Series C Tranche notice, Socius issued to the Company a secured promissory note of $1,500,000 for 19,011,407 shares of common stock and issued a secured promissory note of $300,000 for the exercise of warrants for 3,802,281 shares of common stock.

Interest on the notes accrues at 2% per year, compounding annually if the interest remains unpaid at the end of each year. The note is secured by freely tradable marketable securities belonging to Socius. Each promissory note matures on the fourth anniversary of its issuance.

In the event the Company redeems all or a portion of any shares of Series C preferred stock held by Socius, the Company will be permitted to offset the full amount of such proceeds against amounts outstanding under the promissory notes. Accordingly, the Company included the discounted value of the secured promissory notes as a separate component of stockholders' deficit at December 31, 2013 and 2012.

The value of the secured promissory notes as of December 31, 2013 was $20,451,788, net of discounts of $1,363,762 and accrued interest of $815,549, reflecting a face value of $21,000,000. The value of the secured promissory notes in the consolidated balance sheet was $19,294,139, net of discounts of $2,135,527 and accrued interest of $429,666 at December 31, 2012, reflecting a face value of $21,000,000. The Company determined that a 6% discount is appropriate, in order to consistently reflect the Company's cost of borrowing under the terms of the underlying Series C preferred stock that permits offset. The Company recorded an initial discount on the promissory notes in the amount of $1,968,050 during the year ended December 31, 2011 and an additional $1,026,809 of debt discounts during the years ended December 31, 2012 related to the fifth, sixth and seventh tranche notice. The Company accretes interest at 6% over the respective four-year terms of the promissory notes.

During the years ended December 31, 2013 and 2012, the Company accreted interest on the promissory note in the amount of $1,157,649 and $947,696, respectively, which was recorded in accumulated deficit during the periods then ended. The Company recorded dividends on its Series C preferred stock during the years ended December 31, 2013 and 2012 of $1,129,520 and $925,222, respectively. The accrued dividends are offset by the accretion of the note receivable discount.

The Company has classified the Series C redeemable preferred stock in the equity section in its consolidated balance sheets. As of December 31, 2013 and 2012, 1,750 shares of Series C preferred stock were outstanding.

Below is a table showing the net settlement amount at December 31, 2013 and December 31, 2012:

	December 31, 2013	December 31, 2012
Face Value of Preferred Stock	$17,500,000	$17,500,000
Accrued Dividends	$2,454,853	$1,325,333
Redemption factor	109%	118%
Conversion price	$21,750,790	$22,213,893
Receivable	$21,815,550	$21,429,666
Net settlement upon conversion	$(64,760)	$784,227

13. WARRANT SUMMARY

Warrant Activity

A summary of warrant activity for the years ended December 31, 2013 and 2012 is presented below:

	Number of Warrants	Weighted Average Exercise Price $	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (000) $
Outstanding, December 31, 2011	21,757,421	0.18	2.88	
Granted	14,763,445	0.081		
Exercised	(14,763,445)	0.081		
Forfeited/Canceled	–	–		
Outstanding, December 31, 2012	21,757,421	0.18	1.88	
Granted	–	–		
Exercised	–	–		
Forfeited/Canceled	(13,927,538)	0.13		
Outstanding, December 31, 2013	7,829,883	0.28	1.82	–
Exercisable, December 31, 2013	7,829,883	0.28	1.82	–

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the warrants and the quoted price of the Company’s common stock as of the reporting date.

The following table summarizes information about warrants outstanding and exercisable at December 31, 2013:

	Warrants Outstanding and Exercisable		
Exercise Price $	**Number of Shares**	**Weighted Average Remaining Life (Years)**	**Weighted Average Exercise Price $**
.10 - .11	3,239,247	0.93	0.10

.20 - .30	1,630,000	2.00	0.25
.38-.39	1,330,636	3.57	0.39
.40-.45	815,000	2.00	0.45
0.70	815,000	2.00	0.70
	7,829,883		

14. STOCKHOLDERS' DEFICIT TRANSACTIONS

On September 19, 2012, the Company entered into a purchase agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park"). Pursuant to the purchase agreement, the Company has the right to sell to Lincoln Park up to $35,000,000 in shares of its common stock. Upon signing the purchase agreement, Lincoln Park purchased 10,000,000 shares of the Company's common stock for $800,000 as the initial purchase. In addition, the Company issued 8,750,000 shares of common stock to Lincoln Park as a commitment fee.

Upon the satisfaction of the conditions set forth in the purchase agreement, including the registration statement for the resale of the shares issued thereunder being declared effective by the SEC (which effectiveness occurred on November 6, 2012), the Company has the right over a 36-month period to sell up to an additional $34.2 million worth of shares of its common stock to Lincoln Park, upon the terms set forth in the purchase agreement. Pursuant to the purchase agreement, the purchase price of such shares will be based on the prevailing market price of the Company's common stock immediately preceding the time of sales, with the Company controlling the timing and amount of any future sales, if any, of common stock to Lincoln Park. There are no upper limits to the price Lincoln Park may pay to purchase the Company's common stock. Lincoln Park shall not have the right or the obligation to purchase any shares of common stock on any business day that the closing price of the Company's common stock is below a floor price as provided in the purchase agreement. The purchase price means, with respect to any regular purchase, the lower of: (i) the lowest sale price on the applicable purchase date and (ii) the arithmetic average of the three (3) lowest closing sale prices for the common stock during the ten (10) consecutive business days ending on the business day immediately preceding such purchase date (in each case, to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction that occurs on or after the date of this purchase agreement. However, the purchase price cannot be below $0.03.

During the twelve months ended December 31, 2013, Lincoln Park purchased 253,260,000 shares of common stock for cash proceeds of $17,777,604.

On January 23, 2013, the Company issued an aggregate of 80,357,143 shares to the CAMOFI Parties as required by the Settlement Agreement and in reliance upon the exemption from registration under Section 3(a)(10) of the Securities Act of 1933, as amended. On May 30, 2013 in connection with the settlement, CAMOFI converted $600,000 in Debentures for 10,135,287 shares of common stock. On May 31, 2013 in connection with the settlement, CAMOFI converted $600,000 in Debentures for 9,790,976 shares of common stock. On December 31, 2013 the Company exercised its option to make settlement in shares and issued 11,881,189 to CAMOFI as consideration for the December 31, 2013 $600,000 Debenture payment.

During the twelve months ended December 31, 2013, the Company issued various outside board members 5,453,910 shares of common stock valued at $453,213 as compensation for board services.

During the twelve months ended December 31, 2013, the Company issued 9,142,858 shares of common stock valued at $1,309,140 as executive compensation.

On April 23, 2013, the Company entered into a share exchange agreement with Volation to exchange 27,522,833 freely tradeable shares of the Company's common stock for Volation's 113 shares of Series A-1 redeemable convertible preferred stock and accrued dividends.

On October 22, 2013, at the Annual Meeting of the Company's Shareholders, the Company's shareholders approved an amendment to the Certificate of Incorporation of the Company to effect a reverse stock split of the Company's common stock, par value $0.001 per share, at a ratio not less than one-for-thirty and not greater than one-for-one hundred, and reduce the number of authorized shares of the Company's common stock in the same proportion as the reverse split, with the exact ratio to be set within such range in the discretion of the Board of Directors without further approval or authorization of the Company's shareholders, provided that the Board of Directors determines to effect the reverse stock split and proportional reduction in authorized shares of common stock and such amendment is filed with the Secretary of State of Delaware no later than September 30, 2014.

During the Annual Meeting, the stockholders also approved an Certificate of Amendment to the Certificate of Incorporation, which provides for an increase in the authorized number of shares of the Company's common stock, par value $0.001 per share, from 2,750,000 to 3,750,000. The Certificate of Amendment became effective upon its filing with the Secretary of State of the State of Delaware on October 24, 2013.

Effective July 1, 2011, the Company entered into an amended and restated employment agreement with Gary Rabin. Per the agreement, the Company agreed to issue 10,000,000 shares of restricted stock which vests in equal installments on the last day of each calendar quarter commencing on July 31, 2011 and ending on December 31, 2013. During the year ended December 31, 2012, the Company issued 4,000,000 shares of common stock pursuant to the agreement for a total of 6,000,000 shares issued through December 31, 2012. During the year ended December 31, 2013 the Company issued 4,000,000 shares of common stock pursuant to the agreement for a total of 10,000,000 shares which have been issued to date. The Company valued the 10,000,000 shares at $0.185 per share for a value of $1,850,000 which will be amortized over 30 months. During the years ended December 31, 2013, 2012, and 2011 the Company recorded $740,000, $740,000 and $370,000 as payroll expense in the consolidated statements of operations.

On August 8, 2011, the Company entered into a new employment agreement with Robert Lanza. Per the agreement, the Company agreed to issue 15,000,000 shares of restricted stock with 6,000,000 shares vesting immediately and the remaining 9,000,000 shares vesting over a 21 months period beginning on January 31, 2012. The agreement had an end date of September 30, 2013. During the year ended December 31, 2012, the Company issued 5,142,857 shares of common stock pursuant to the agreement. As of December 31, 2012, 11,142,857 shares had been issued. Through the nine months ended September 30, 2013 the Company issued the remaining 3,857,143 shares per the agreement. The Company valued the original 15,000,000 shares at $0.1571 per share, for a value of $2,356,500 which was amortized through September 30, 2013. On November 8, 2013 the Company and Mr. Lanza agreed to extend the employment agreement through December 31, 2013 and issue an additional 1,285,714 shares. The additional 1,285,714 shares were valued at $0.062 per share, for a value of $79,714, which was amortized through December 31, 2013. During the years ended December 31, 2013, 2012 and 2011 the Company recorded $569,140, $652,568, and $1,214,504 as payroll expense in the accompanying consolidated statements of operations.

15. STOCK-BASED COMPENSATION

The Company determined that in certain periods in 2009 and again in Q4 2011 it did not have the required amount of authorized, unissued common shares to deliver to option holders under its stock plans. As a result, under ASC 718, Compensation - Stock Compensation, certain equity balances were adjusted and accounted for as liabilities and marked-to-market until shareholder approval for additional shares to cover outstanding stock options occurred. In 2011 the lack of required authorized, unissued shares occurred on November 2, 2011 and shareholder approval for necessary shares to cover the outstanding option pool took place on January 24, 2012. As a result at that time in 2012 the stock options were considered equity classified share compensation. See Note 2, “Restatement of Previously Issued Consolidated Financial Statements”.

Stock Plans

	Options/Shares	Options	Options/Shares Available

Stock Plan	Issued	Outstanding	For Grant
2004 Stock Plan	2,492,000	70,000	1,215,104
2004 Stock Plan II	1,301,161	1,071,161	–
2005 Stock Plan	150,048,071	117,137,450	299,777,464
	153,841,232	118,278,611	300,992,568

Stock Option Activity

A summary of option activity for the years ended December 31, 2013, 2012, and 2011 is presented below:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2010	48,376,119	$ 0.23	7.56	$ 3,825
Granted	46,207,499	0.22		
Exercised	(2,250,000)	0.09		
Forfeited/canceled	(533,333)	0.10		
Outstanding, December 31, 2011	91,800,285	$ 0.23	8.19	$ -
Granted	9,872,518	0.10		
Exercised	–	–		
Forfeited/canceled	(1,000,000)	0.12		
Outstanding, December 31, 2012	100,672,803	$ 0.22	7.45	$ 399
Granted	25,510,714	0.08		
Exercised	–	–		
Forfeited/canceled	(7,904,906)	0.14	–	
Outstanding, December 31, 2013	118,278,611	$ 0.19	6.95	$ 10,319
Vested and expected to vest at December 31, 2013	116,510,015	$ 0.19	6.91	$ 10,319
Exercisable, December 31, 2013	104,674,029	$ 0.21	6.63	$ 10,319

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the options and the quoted price of the Company's common stock as of the reporting date.

The following table summarizes information about stock options outstanding and exercisable at December 31, 2013.

	Options Outstanding			Options Exercisable		
Exercise Price	Number of Shares	**Weighted Average** Exercise Price	Weighted Average Remaining Life (Years)	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Life (Years)
$0.05 -0.079	19,980,714	$ 0.07	9.48	8,647,381	$ 0.07	9.35
0.08 - 0.09	28,325,892	0.09	6.17	26,054,643	0.09	5.94
0.10 - 0.157	26,943,829	0.14	7.60	26,943,829	0.14	7.60
0.185 - 0.21	25,934,166	0.19	6.73	25,934,166	0.19	6.73
0.25 - 0.45	11,071,161	0.36	6.81	11,071,161	0.36	6.81
0.85	5,417,849	0.85	0.39	5,417,849	0.85	0.39
$1.35 - 2.48	605,000	$ 2.02	1.87	605,000	$ 2.02	1.87
	118,278,611			104,674,029		

The assumptions used in calculating the fair value of options granted using the Black-Scholes option- pricing model for options granted during the three years ended December 31, 2013 are as follows:

	December 31, 2013	December 31, 2012	December 31, 2011
Risk-free interest rate	0.66 – 2.17%	0.66 – .92%	0.36%
Expected life of the options	3.90 - 6.02 years	3.90 – 5.45 years	3.05 – 3.18 years
Expected volatility	134% -158%	149% - 158%	125%
Expected dividend yield	0%	0%	0%
Expected forfeitures	13%	13%	13%

The weighted average grant-date fair value for the options granted during the years ended December 31, 2013, 2012 and 2011 was $0.07, $0.09, and $0.16, respectively.

Stock-based compensation expense to employees and non-employees for the years ended December 31, 2013, 2012 and 2011, was $3,880,058 $7,795,885, and $67,287, respectively. The compensation expense related to the unvested options as of December 31, 2013, was $1,056,343 which will be recognized over the weighted average period of 9.33 years.

Restricted Common Stock Activity

Pursuant to employment agreements with Gary Rabin and Robert Lanza the Company issued shares of restricted stock. A summary of the restricted stock activity for the years ended December 31, 2013, 2012, and 2011 is presented below:

	Number of Restricted Stock Shares	Weighted Average Grant Date Fair Value ($)
Outstanding, December 31, 2010	5,000,000	0.140
Granted	25,000,000	0.168
Vested	(13,000,000)	0.164
Forfeited/canceled	–	
Unvested, December 31, 2011	17,000,000	0.170
Granted	–	–
Vested	(9,142,857)	0.169
Forfeited/canceled	–	
Unvested, December 31, 2012	7,857,143	0.171
Granted	1,285,714	0.062
Vested	(9,142,857)	0.147
Forfeited/canceled	–	
Unvested, December 31, 2013	–	–

The Company recorded compensation expense of $1,309,140, $1,392,569, and $641,904, for the years ended December 31, 2013, 2012 and 2011, respectively.

16. COMMITMENTS AND CONTINGENCIES

Employment Contracts

The Company has entered into employment contracts with certain executives and research personnel. The contracts provide for salaries, bonuses and stock option grants, along with other employee benefits.

Agreements

On May 4, 2012, the Company entered into an exclusive license agreement with StemLifeLine, Inc. in which the Company obtained exclusive rights, with the right to sublicense, for commercial use of certain human stem cell lines that were created by StemLifeLine using the Company's single blastomere technology – i.e., without destruction of any embryos. These lines were intended to be used in the Company's manufacture of cell therapy products. The Company paid a single one-time fee of $65,000 to StemLifeLine for the exclusive license, and will not owe any further fees or royalties under the exclusive license. In addition to the exclusive license, the Company also obtained a non-exclusive license to distribute other human embryonic stem cell lines made by StemLifeLine, Inc. through stem cell banks, such as in collaboration with Roslin Cells Inc. with whom the Company had a preexisting hES cell banking agreement. Under the terms of the non-exclusive license relating to cell bank distribution, the Company will pay the first $200,000 in revenue that the Company receives from the cell bank, and 20% of any such revenue thereafter.

Leases

On January 29, 2010, the Company signed a lease to move from its Worcester facility to a new 10,607 square-foot facility in Marlborough, Massachusetts. The lease term is from April 1, 2010 through July 31, 2015. Monthly base rent was $13,259, $13,038, and $12,817 for 2013, 2012 and 2011, respectively. The Company amended the lease effective March 1, 2011 adding an additional 1,650 square feet with an increase in monthly rent of $1,513. On January 11, 2013 the Company added an additional 17,696 square feet at its Marlborough location with a monthly base rent amount of $21,383, with a lease term from January 2013 through March 2018.

During 2011, the Company renewed its site in Los Angeles, California through February 28, 2013 with a monthly base rent of $2,170. In November 2012, the Company entered into a new lease agreement that became effective July 1, 2013 and terminates on June 30, 2018. The monthly rent for this space is $6,272 per month for months 1 through 12, $6,460 per month for months 13 through 24, $6,654 per month for months 25 through 36, $6,854 per month for months 37 through 48, and $7,059 per month for months 49 through 60.

Annual minimum lease payments are as follows:

2014	$513,820
2015	448,302
2016	349,803
2017	356,659
2018	110,927
	$1,779,511

Rent expense recorded in the financial statements for the years ended December 31, 2013, 2012 and 2011 was approximately $419,347, $187,000, and $201,000 respectively.

17. INCOME TAXES

The items accounting for the difference between income taxes computed at the federal statutory rate and the provision for income taxes were as follows:

	2013	2012	2011
Statutory federal income tax rate	(34)%	(34)%	(34)%
State income taxes, net of federal taxes	(6)%	(6)%	(6)%
Non-includable items	17%	11%	29%
Increase in valuation allowance	23%	29%	12%
Effective income tax rate	–	–	–

Significant components of deferred tax assets and (liabilities) are as follows:

	2013	2012
Deferred tax assets:		
Net operating loss carryforwards	$54,916,539	$49,011,399
Depreciation	155,651	151,194
Capitalized R&D expenses	4,142,634	1,936,824
Deferred revenue	(167,791)	(77,592)
Losses from joint venture	348,102	348,102
Professional fees	47,558	88,658
Charitable contributions	(20,603)	–
Other	4,805	–
Reversal of unpaid liabilities	1,238,538	1,238,538
Valuation allowance	(60,665,433)	(52,697,123)
Net deferred tax asset	$–	$–

The Company files income tax returns in the U.S. federal jurisdiction, and various state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2008.

At December 31, 2013, the Company had federal and state net operating loss carry forwards available to offset future taxable income of approximately $131 million and $90 million respectively. These carry forwards will begin to expire in the years ending December 31, 2020 and December 31, 2014, respectively. These net operating losses are subject to various limitations on utilization based on ownership changes in the prior years under Internal Revenue Code Section 382. The Company is in the process of analyzing the impact of the ownership changes but management does not believe they will have a material impact on the Company’s ability to utilize the net operating losses in the future.

The Company periodically evaluates the likelihood of the realization of deferred tax assets, and adjusts the carrying amount of the deferred tax assets by the valuation allowance to the extent the future realization of the deferred tax assets is not judged to be more likely than not. The Company considers many factors when assessing the likelihood of future realization of its deferred tax assets, including its recent cumulative earnings experience by taxing jurisdiction, expectations of future taxable income or loss, the carryforward periods available to the Company for tax reporting purposes, and other relevant factors.

At December 31, 2013, based on the weight of available evidence, including cumulative losses in recent years and expectations of future taxable income, the Company determined that it was more likely than not that its deferred tax assets would not be realized and have a $60.7 million valuation allowance associated with its deferred tax assets.

The components of income tax expense are as follows:

	2013	2012	2011
Current federal income tax	$–	$–	$–
Current state income tax	–	–	–
Deferred taxes	7,968,310	2,021,705	7,878,246
Valuation allowance	(7,968,310)	(2,021,705)	(7,878,246)
	$–	$–	$–

Future changes in the unrecognized tax benefit will have no impact on the effective tax rate due to the existence of the valuation allowance. The Company estimates that the unrecognized tax benefit will not change significantly within the next twelve months. The Company will continue to classify income tax penalties and interest as part of general and administrative expense in its consolidated statements of operations. There were no interest or penalties accrued as of December 31, 2013, 2012 or 2011.

The following table summarizes the open tax years for each major jurisdiction:

Jurisdiction	Open Tax Years
Federal	2010 - 2012
States	2008 - 2012

18. SUBSEQUENT EVENTS

Separation Agreement with CEO

On January 21, 2014, the Company entered into a Separation Agreement (the "Agreement") with Gary Rabin. Entry into the Agreement was made in connection with Mr. Rabin's departure from his roles of Chief Executive Officer and a director of the Company.

Pursuant to the Agreement, as consideration for a general release of claims against the Company and related parties, Mr. Rabin will receive the following:

(a) seven (7) months of his base salary, payable in accordance with the Company's standard payroll practices;

and

(b) a one-time payment of $15,000 payable on the first payroll date following the last day of the seven month severance period.

Camofi/Camhzn Debt

From the period January 1, 2014 through March 17, 2014, the Company received conversion notices for a total of approximately $2,400,000. The Company issued 43,373,609 shares of its common stock for these conversion notices. As a result the outstanding amount of the Camofi Senior Secured Convertible Debentures has been reduced to approximately $1,200,000.

Lincoln Park

From the period January 1, 2014 through March 17, 2014, the Company received $7,706,756 from the issuance of 114,287,000 shares to Lincoln Park under the purchase agreement.

19. SUMMARIZED QUARTERLY UNAUDITED FINANCIAL DATA (Restated)

As discussed in greater detail in Note 2, Restatement of Previously Issued Consolidated Financial Statements, we determined we needed to restate our previously issued consolidated financial information for the quarterly periods ended March 31, 2013, June 30, 2013, September 30, 20013 and each of the quarterly periods in the year ended December 31, 2012 and December 31, 2013. The restatements resulted from a correction in the recognition of liabilities related to a Warrant Agreement and unsettled warrant share obligation from January 2009 and a stock compensation expense error related to inadequate authorized and unissued shares to settle share based awards.

The following tables summarize the effects of the restatement and presentation reclassifications on our previously issued unaudited condensed consolidated financial statements:

2013 Summary of increases (decreases) in net loss (unaudited)

	For the Quarter Ended				
	March 31, 2013	June 30, 2013		September 30, 2013	
	Three Months Ended	Three Months Ended	Six Months Ended	Three Months Ended	Nine Months Ended
Net loss, as previously reported	$(6,413,041)	$(6,611,346)	$(13,024,387)	$(5,705,122)	$(18,729,509)
Net adjustments					
Research and development (Restatement)	(106,559)	(113,033)	(219,592)	(163,079)	(382,671)
General and administrative expenses (Restatement)	(8,005)	(9,524)	(17,529)	(8,568)	(26,097)
Adjustments to fair value of unsettled warrant obligation	16,968	(160,153)	(143,185)	131,034	(12,151)
Net loss, restated	$(6,510,637)	$(6,894,056)	$(13,404,693)	$(5,745,735)	$(19,150,428)
Basic loss per share:					
Net loss, as previously reported	$(0.00)	$(0.00)	$(0.01)	$(0.00)	$(0.01)
Net adjustments					
Research and development (Restatement)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
General and administrative expenses (Restatement)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Adjustments to fair value of unsettled warrant obligation	0.00	(0.00)	(0.00)	0.00	(0.00)
Net loss, restated	$(0.00)	$(0.00)	$(0.01)	$(0.00)	$(0.01)
Diluted loss per share:					
Net loss, as previously reported	$(0.00)	$(0.00)	$(0.01)	$(0.00)	$(0.01)
Net adjustments					
Research and development (Restatement)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
General and administrative expenses (Restatement)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Adjustments to fair value of unsettled warrant obligation	0.00	(0.00)	(0.00)	0.00	(0.00)
Net loss, restated	$(0.00)	$(0.00)	$(0.01)	$(0.00)	$(0.01)
Weighted average shares used in computing net loss					

per share:					
Basic	2,251,585,598	2,451,694,258	2,389,481,712	2,573,191,224	2,451,391,145
Diluted	2,251,585,598	2,451,694,258	2,389,481,712	2,573,191,224	2,451,391,145

2012 Summary of increases (decreases) in net loss (unaudited)

	For the Quarter Ended					
	March 31, 2012	June 30, 2012		September 30, 2012		December 31, 2012
	Three Months Ended	Three Months Ended	Six Months Ended	Three Months Ended	Nine Months Ended	Three Months Ended
Net loss, as previously reported	$(5,712,490)	$(3,959,443)	$(9,671,933)	$(8,508,251)	$(18,180,184)	$(10,346,077)
Net adjustments						
Research and development (Restatement)	(2,470,817)	(217,761)	(2,688,578)	(217,761)	(2,906,339)	(217,761)
General and administrative expenses (Restatement)	(1,455,167)	296,411	(1,158,756)	103,467	(1,055,289)	74,653
Adjustments to fair value of unsettled warrant obligation	(2,115,996)	229,980	(1,886,016)	(3,749)	(1,889,765)	(63,353)
Net loss, restated	$(11,754,470)	$(3,650,813)	$(15,405,283)	$(8,626,294)	$(24,031,577)	$(10,552,538)
Basic loss per share:						
Net loss, as previously reported	$(0.00)	$(0.00)	$(0.00)	$(0.00)	$(0.01)	$(0.00)
Net adjustments						
Research and development (Restatement)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
General and administrative expenses (Restatement)	(0.00)	0.00	0.00	0.00	(0.00)	0.00
Adjustments to fair value of unsettled warrant obligation	(0.00)	0.00	0.00	(0.00)	(0.00)	(0.00)

Net loss, restated	$(0.01)	$0.00	$(0.01)	$(0.00)	$(0.01)	$(0.00)
Diluted loss per share:						
Net loss, as previously reported	$(0.00)	$(0.00)	$(0.00)	$(0.00)	$(0.01)	$(0.00)
Net adjustments						
Research and development (Restatement)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
General and administrative expenses (Restatement)	(0.00)	0.00	0.00	0.00	(0.00)	0.00
Adjustments to fair value of unsettled warrant obligation	(0.00)	0.00	0.00	(0.00)	(0.00)	(0.00)
Net loss, restated	$(0.01)	$0.00	$(0.01)	$(0.00)	$(0.01)	$(0.00)
Weighted average shares used in computing net loss per share:						
Basic	1,942,293,307	2,076,212,012	2,010,442,657	2,122,463,857	2,048,055,615	2,193,859,375
Diluted	1,942,293,307	2,076,212,012	2,010,442,657	2,122,463,857	2,048,055,615	2,193,859,375

2011 Summary of increases (decreases) in net loss (unaudited)

	For the Quarter Ended					
	March 31, 2011	June 30, 2011		September 30, 2011		December 31, 2011
	Three Months Ended	Three Months Ended	Six Months Ended	Three Months Ended	Nine Months Ended	Three Months Ended
Net loss, as previously reported	$(3,342,037)	$(4,820,149)	$(8,162,186)	$(52,521,029)	$(60,683,215)	$(12,111,904)
Net adjustments						
Research and development (Restatement)	(39,760)	(39,760)	(79,520)	(84,196)	(163,716)	363,181
General and administrative expenses (Restatement)	359,552	376,108	735,660	2,086,161	2,821,821	767,929
Adjustments to fair value of unsettled warrant obligation	1,579,980	(126,398)	1,453,582	6,946,172	8,399,754	5,413,347
Net loss, restated	$(1,442,265)	$(4,610,199)	$(6,052,464)	$(43,572,892)	$(49,625,356)	$(5,567,447)
Basic loss per share:						
Net loss, as previously reported	$(0.00)	$(0.00)	$(0.01)	$(0.03)	$(0.04)	$(0.01)
Net adjustments						
Research and development (Restatement)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.00
General and administrative expenses (Restatement)	0.00	0.00	0.00	0.00	0.00	0.00
Adjustments to fair value of unsettled warrant obligation	0.00	(0.00)	0.01	0.00	0.01	0.01

Net loss, restated	$(0.00)	$0.00	$(0.00)	$(0.03)	$(0.03)	$(0.00)
Diluted loss per share:						
Net loss, as previously reported	$(0.00)	$(0.00)	$(0.01)	$(0.03)	$(0.04)	$(0.01)
Net adjustments						
Research and development (Restatement)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.00
General and administrative expenses (Restatement)	0.00	0.00	0.00	0.00	0.00	0.00
Adjustments to fair value of unsettled warrant obligation	0.00	(0.00)	0.01	0.00	0.01	0.01
Net loss, restated	$(0.00)	$0.00	$(0.00)	$(0.03)	$(0.03)	$(0.00)
Weighted average shares used in computing net loss per share:						
Basic	1,478,231,834	1,543,519,167	1,510,945,682	1,613,530,283	1,546,379,685	1,547,852,307
Diluted	1,478,231,834	1,543,519,167	1,510,945,682	1,613,530,283	1,546,379,685	1,547,852,307

2013 Quarterly Consolidated Balance Sheets (unaudited)

	As of March 31, 2013		As of June 30, 2013		As of September 30, 2013	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Assets						
Current assets:						
Cash and cash equivalents	$4,111,434	$4,111,434	$5,464,054	$5,464,054	$5,452,653	$5,452,653
Grants receivable	254,279	254,279	60,022	60,022	25,685	25,685
Deferred royalty fees, current portion	92,435	92,435	62,435	62,435	62,435	62,435
Prepaid expenses	326,517	326,517	349,319	349,319	949,065	949,065
Total current assets	4,784,665	4,784,665	5,935,830	5,935,830	6,489,838	6,489,838
Property and equipment, net	255,790	255,790	572,152	572,152	697,027	697,027
Deferred royalty fees, less current portion	155,857	155,857	138,998	138,998	123,388	123,388
Deposits	38,661	38,661	38,220	38,220	66,751	66,751
Deferred costs, net	369,773	369,773	264,693	264,693	165,298	165,298
Total assets	$5,604,746	$5,604,746	$6,949,893	$6,949,893	$7,542,302	$7,542,302
Liabilities and Stockholders' Deficit						
Current liabilities:						
Accounts payable	$2,439,123	$2,439,123	$2,382,843	$2,382,843	$2,716,272	$2,716,272
Accrued expenses	2,611,378	2,611,378	2,627,808	2,627,808	2,647,728	2,647,728
Convertible promissory notes, current portion	287,785	287,785	–	–	–	–
Senior secured convertible promissory notes, current portion	2,604,545	2,604,545	2,055,755	2,055,755	2,124,604	2,124,604
	505,075	505,075	234,227	234,227	235,595	235,595

Embedded conversion option liabilities, current portion						
Unsettled warrant obligation	–	4,404,985	–	4,961,138	–	4,506,104
Loss contingency accrual	6,859,607	3,723,107	7,871,898	4,339,398	7,528,896	4,320,396
Deferred revenue, current portion	176,622	176,622	157,872	157,872	157,872	157,872
Total current liabilities	15,484,135	16,752,620	15,330,403	16,759,041	15,410,967	16,708,571
Senior secured convertible promissory notes, less current portion	2,802,273	2,802,273	1,706,116	1,706,116	1,724,893	1,724,893
Embedded conversion option liabilities, less current portion	453,000	453,000	466,773	466,773	467,405	467,405
Warrant and option derivative liabilities	435,792	435,792	496,078	496,078	357,875	357,875
Deferred revenue, less current portion	1,868,106	1,868,106	1,828,638	1,828,638	1,789,170	1,789,170
Total liabilities	21,043,306	22,311,791	19,828,008	21,256,646	19,750,310	21,047,914
Series A-1 redeemable preferred stock	1,641,006	1,641,006	–	–	–	–
Stockholders' Deficit:						
Preferred stock, Series B	1	1	1	1	1	1
Preferred stock, Series C	2	2	2	2	2	2
Common stock	2,387,937	2,387,937	2,529,495	2,529,495	2,608,116	2,608,116
Additional paid-in capital	301,443,293	300,808,879	312,706,253	312,194,396	319,606,218	319,266,008
Promissory notes receivable, net	(32,189,828)	(32,189,828)	(32,788,398)	(32,788,398)	(33,399,438)	(33,399,438)
Accumulated deficit	(288,720,971)	(289,355,042)	(295,325,468)	(296,242,249)	(301,022,907)	(301,980,301)
Total stockholders'	(17,079,566)	(18,348,051)	(12,878,115)	(14,306,753)	(12,208,008)	(13,505,612)

deficit						
Total liabilities and stockholders' deficit	$5,604,746	$5,604,746	$6,949,893	$6,949,893	$7,542,302	$7,542,302

2012 Quarterly Consolidated Balance Sheets (unaudited)

	As of March 31, 2012		As of June 30, 2012		As of September 30, 2012	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Assets						
Current assets:						
Cash and cash equivalents	$10,778,045	$10,778,045	$9,862,536	$9,862,536	$8,254,014	$8,254,014
Grants receivable	–	–	–	–	140,046	140,046
Deferred royalty fees, current portion	62,435	62,435	62,435	62,435	62,435	62,435
Prepaid expenses	199,262	199,262	122,712	122,712	95,464	95,464
Total current assets	11,039,742	11,039,742	10,047,683	10,047,683	8,551,959	8,551,959
Property and equipment, net	151,857	151,857	153,600	153,600	129,499	129,499
Deferred royalty fees, less current portion	217,043	217,043	201,434	201,434	185,825	185,825
Deposits	14,766	14,766	14,766	14,766	14,766	14,766
Deferred costs, net	1,175,554	1,175,554	974,661	974,661	771,560	771,560
Total assets	$12,598,962	$12,598,962	$11,392,144	$11,392,144	$9,653,609	$9,653,609
Liabilities and Stockholders' Deficit						
Current liabilities:						
Accounts payable	$1,872,248	$1,872,248	$1,839,515	$1,839,515	$2,003,884	$2,003,884
Accrued expenses	1,827,655	1,827,655	1,825,684	1,825,684	2,244,583	2,244,583
Convertible promissory notes, current portion	161,270	161,270	192,898	192,898	224,874	224,874
Senior secured convertible promissory notes, current portion	–	–	186,484	186,484	160,371	160,371

Embedded conversion option liabilities, current portion						
Unsettled warrant obligation	–	5,498,331	–	3,918,351	–	4,822,100
Loss contingency accrual	15,474,595	11,424,595	15,347,341	12,647,341	14,653,227	11,053,227
Deferred revenue, current portion	217,333	217,333	338,617	338,617	309,901	309,901
Total current liabilities	19,553,101	21,001,432	19,730,539	20,948,890	19,596,840	20,818,940
Senior secured convertible promissory notes, less current portion		–	–	–	–	–
Embedded conversion option liabilities, less current portion	228,435	228,435	5,286	5,286	3,629	3,629
Warrant and option derivative liabilities	1,866,913	1,866,913	1,178,897	1,178,897	1,555,417	1,555,417
Deferred revenue, less current portion	2,025,978	2,025,978	1,986,510	1,986,510	1,947,042	1,947,042
Total liabilities	23,674,427	25,122,758	22,901,232	24,119,583	23,102,928	24,325,028
Series A-1 redeemable preferred stock	1,468,930	1,468,930	1,511,701	1,511,701	1,555,117	1,555,117
Stockholders' Deficit:						
Preferred stock, Series B	1	1	1	1	1	1
Preferred stock, Series C	1	1	2	2	2	2
Common stock	2,073,832	2,073,832	2,112,215	2,112,215	2,191,303	2,191,303
Additional paid-in capital	271,300,678	270,372,948	277,304,154	276,297,774	285,831,971	284,939,885
Promissory notes receivable, net	(26,402,020)	(26,402,020)	(28,966,005)	(28,966,005)	(31,055,048)	(31,055,048)
Accumulated deficit	(259,516,887)	(260,037,488)	(263,471,156)	(263,683,127)	(271,972,665)	(272,302,679)
Total stockholders'	(12,544,395)	(13,992,726)	(13,020,789)	(14,239,140)	(15,004,436)	(16,226,536)

deficit						
Total liabilities and stockholders' deficit	$12,598,962	$12,598,962	$11,392,144	$11,392,144	$9,653,609	$9,653,609

2013 Quarterly Consolidated Statements of Operations (unaudited)

	March 31, 2013 Three Months Ended		June 30, 2013 Three Months Ended		Six Months Ended	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Revenue	$87,781	$87,781	$58,268	$58,268	$146,049	$146,049
Cost of revenue	34,359	34,359	16,859	16,859	51,218	51,218
Gross profit	53,422	53,422	41,409	41,409	94,831	94,831
Operating expenses:						
Research and development	2,992,000	3,098,559	2,862,237	2,975,270	5,854,237	6,073,829
General and administrative expenses	2,825,864	2,833,869	2,643,319	2,652,843	5,469,183	5,486,712
Total operating expenses	5,817,864	5,932,428	5,505,556	5,628,113	11,323,420	11,560,541
Loss from operations	(5,764,442)	(5,879,006)	(5,464,147)	(5,586,704)	(11,228,589)	(11,465,710)
Non-operating income (expense):						
Interest income	1,777	1,777	1,015	1,015	2,792	2,792
Interest expense and late fees	(524,189)	(524,189)	(370,228)	(370,228)	(894,417)	(894,417)
Finance gain (cost)	(293,120)	336,880	(687,139)	(291,139)	(980,259)	45,741
Fines and penalties	–	–	(587,147)	(587,147)	(587,147)	(587,147)
Gain on extinguishment of debt	–	–	438,587	438,587	438,587	438,587
Adjustments to fair value of unsettled warrant obligation	–	(613,032)	–	(556,153)	–	(1,169,185)
Adjustments to fair value of derivatives	166,933	166,933	57,713	57,713	224,646	224,646
Total non-operating expense	(648,599)	(631,631)	(1,147,199)	(1,307,352)	(1,795,798)	(1,938,983)
	(6,413,041)	(6,510,637)	(6,611,346)	(6,894,056)	(13,024,387)	(13,404,693)

Loss before provision for income tax						
Provision for income tax	–	–	–	–	–	–
Net loss	$(6,413,041)	$(6,510,637)	$(6,611,346)	$(6,894,056)	$(13,024,387)	$(13,404,693)
Loss per share:						
Basic	$(0.00)	$(0.00)	$(0.00)	$(0.00)	$(0.01)	$(0.01)
Diluted	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
Weighted average shares outstanding:						
Basic	2,251,585,598	2,251,585,598	2,451,694,258	2,451,694,258	2,389,481,712	2,389,481,712
Diluted	2,251,585,598	2,251,585,598	2,451,694,258	2,451,694,258	2,389,481,712	2,389,481,712

2013 Quarterly Consolidated Statements of Operations (unaudited)

	September 30, 2013 Three Months Ended		Nine Months Ended		Three Months **Ended December 31, 2013**
	As Previously Reported	As Restated	As Previously Reported	As Restated	
Revenue	$39,468	$39,468	$185,517	$185,517	$39,468
Cost of revenue	15,609	15,609	66,827	66,827	15,609
Gross profit	23,859	23,859	118,690	118,690	23,859
Operating expenses:					
Research and development	2,898,253	3,061,332	8,285,406	8,668,077	2,896,691
General and administrative expenses	3,211,866	3,220,434	9,148,133	9,174,230	2,882,837
Change in estimate of loss on settlement of litigation	–	–	–	–	6,228,621
Total operating expenses	6,110,119	6,281,766	17,433,539	17,842,307	12,008,149
Loss from operations	(6,086,260)	(6,257,907)	(17,314,849)	(17,723,617)	(11,984,290)
Non-operating income (expense):					
Interest income	162,548	162,548	165,340	165,340	578
Interest expense and late fees	(271,021)	(271,021)	(1,165,438)	(1,165,438)	(272,146)
Finance gain (cost)	343,002	19,002	(637,257)	64,743	30,419
Fines and penalties	–	–	(587,147)	(587,147)	(375,080)
Gain on extinguishment of debt	–	–	438,587	438,587	–
Adjustments to fair value of unsettled warrant liability	–	455,034	–	(714,151)	606,713
Adjustments to fair value of derivatives	146,609	146,609	371,255	371,255	121,986
Total non-operating expense	381,138	512,172	(1,414,660)	(1,426,811)	112,470
Loss before provision for income tax	(5,705,122)	(5,745,735)	(18,729,509)	(19,150,428)	(11,871,820)
Provision for income tax	–	–	–	–	–
Net loss	$(5,705,122)	$(5,745,735)	$(18,729,509)	$(19,150,428)	$(11,871,820)
Loss per share:					
Basic	$(0.00)	$(0.00)	$(0.01)	$(0.01)	$(0.00)
Diluted	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)
Weighted average shares outstanding:					
Basic	2,573,191,224	2,573,191,224	2,451,391,145	2,451,391,145	2,592,594,262
Diluted	2,573,191,224	2,573,191,224	2,451,391,145	2,451,391,145	2,592,594,262

2012 Quarterly Consolidated Statements of Operations (unaudited)

	March 31, 2012 Three Months Ended		June 30, 2012 Three Months Ended		Six Months Ended	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Revenue	$55,685	$55,685	$218,184	$218,184	$273,869	$273,869
Cost of revenue	15,609	15,609	15,609	15,609	31,218	31,218
Gross profit	40,076	40,076	202,575	202,575	242,651	242,651
Operating expenses:						
Research and development	2,440,542	4,911,359	2,068,098	2,285,859	4,508,640	7,197,218
General and administrative expenses	3,019,005	4,474,172	2,612,471	2,316,060	5,631,476	6,790,232
Total operating expenses	5,459,547	9,385,531	4,680,569	4,601,919	10,140,116	13,987,450
Loss from operations	(5,419,471)	(9,345,455)	(4,477,994)	(4,399,344)	(9,897,465)	(13,744,799)
Non-operating income (expense):						
Interest income	5,077	5,077	4,508	4,508	9,585	9,585
Interest expense and late fees	(272,324)	(272,324)	(275,292)	(275,292)	(547,616)	(547,616)
Finance gain (cost)	115,827	(1,684,173)	3,555,254	2,205,254	3,671,081	521,081
Fines and penalties	–	–	(3,500,000)	(3,500,000)	(3,500,000)	(3,500,000)
Adjustments to fair value of unsettled warrant liability	–	(315,996)	–	1,579,980	–	1,263,984
Adjustments to fair value of derivatives	(141,599)	(141,599)	734,081	734,081	592,482	592,482
Total non-operating expense	(293,019)	(2,409,015)	518,551	748,531	225,532	(1,660,484)

Loss before provision for income tax	(5,712,490)	(11,754,470)	(3,959,443)	(3,650,813)	(9,671,933)	(15,405,283)
Provision for income tax	–	–	–	–	–	–
Net loss	$(5,712,490)	$(11,754,470)	$(3,959,443)	$(3,650,813)	$(9,671,933)	$(15,405,283)
Loss per share:						
Basic	$(0.00)	$(0.01)	$(0.00)	$(0.00)	$(0.00)	$(0.01)
Diluted	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
Weighted average shares outstanding:						
Basic	1,942,293,307	1,942,293,307	2,076,212,012	2,076,212,012	2,010,442,657	2,010,442,657
Diluted	1,942,293,307	1,942,293,307	2,076,212,012	2,076,212,012	2,010,442,657	2,010,442,657

2012 Quarterly Consolidated Statements of Operations (unaudited)

	September 30, 2012				December 31, 2012	
	Three Months Ended		Nine Months Ended		Three Months Ended	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Revenue	$68,184	$68,184	$342,053	$342,053	$124,434	$124,434
Cost of revenue	15,609	15,609	46,827	46,827	70,609	70,609
Gross profit	52,575	52,575	295,226	295,226	53,825	53,825
Operating expenses:						
Research and development	2,808,300	3,026,061	7,316,940	10,223,279	3,717,896	3,935,657
General and administrative expenses	2,249,818	2,146,351	7,881,294	8,936,583	2,570,936	2,496,283
Total operating expenses	5,058,118	5,172,412	15,198,234	19,159,862	6,288,832	6,431,940
Loss from operations	(5,005,543)	(5,119,837)	(14,903,008)	(18,864,636)	(6,235,007)	(6,378,115)
Non-operating income (expense):						
Interest income	3,585	3,585	13,170	13,170	2,411	2,411
Interest expense and late fees	(278,493)	(278,493)	(826,109)	(826,109)	(278,493)	(278,493)
Finance gain (cost)	(2,891,600)	(1,991,600)	779,481	(1,470,519)	(4,451,451)	(5,544,951)
Gain (loss) on disposal of fixed assets	–	–	–	–	(17,138)	(17,138)
Fines and penalties	–	–	(3,500,000)	(3,500,000)	–	–
Adjustments to fair value of unsettled warrant liability	–	(903,749)	–	360,235	–	1,030,147
Adjustments to fair value of derivatives	(336,200)	(336,200)	256,282	256,282	633,601	633,601

Total non-operating expense	(3,502,708)	(3,506,457)	(3,277,176)	(5,166,941)	(4,111,070)	(4,174,423)
Loss before provision for income tax	(8,508,251)	(8,626,294)	(18,180,184)	(24,031,577)	(10,346,077)	(10,552,538)
Provision for income tax	–	–	–	–	–	–
Net loss	$(8,508,251)	$(8,626,294)	$(18,180,184)	$(24,031,577)	$(10,346,077)	$(10,552,538)
Loss per share:						
Basic	$(0.00)	$(0.00)	$(0.01)	$(0.01)	$(0.00)	$(0.00)
Diluted	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)
Weighted average shares outstanding:						
Basic	2,122,463,857	2,122,463,857	2,048,055,615	2,048,055,615	2,193,859,375	2,193,859,375
Diluted	2,122,463,857	2,122,463,857	2,048,055,615	2,048,055,615	2,193,859,375	2,193,859,375

2011 Quarterly Consolidated Statements of Operations (unaudited)

	March 31, 2011 Three Months Ended		June 30, 2011 Three Months Ended		Six Months Ended	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Revenue	$153,688	$153,688	$153,688	$153,688	$307,376	$307,376
Cost of revenue	22,900	22,900	281,500	281,500	304,400	304,400
Gross profit	130,788	130,788	(127,812)	(127,812)	2,976	2,976
Operating expenses:						
Research and development	1,474,773	1,514,533	1,532,271	1,572,031	3,007,044	3,086,564
General and administrative expenses	3,197,526	2,837,974	1,951,728	1,575,620	5,149,254	4,413,594
Loss on settlement of litigation	294,144	294,144	–	–	294,144	294,144
Total operating expenses	4,966,443	4,646,651	3,483,999	3,147,651	8,450,442	7,794,302
Loss from operations	(4,835,655)	(4,515,863)	(3,611,811)	(3,275,463)	(8,447,466)	(7,791,326)
Non-operating income (expense):						
Interest income	11,784	11,784	10,765	10,765	22,549	22,549
Interest expense and late fees	(681,710)	(681,710)	(272,171)	(272,171)	(953,881)	(953,881)
Finance gain (cost)	(2,625,875)	(2,625,875)	(245,734)	(245,734)	(2,871,609)	(2,871,609)
Loss attributable to equity method investments	–	–	–	–	–	–
Adjustments to fair value of unsettled warrant liability	–	1,579,980	–	(126,398)	–	1,453,582
	4,789,419	4,789,419	(701,198)	(701,198)	4,088,221	4,088,221

Adjustments to fair value of derivatives						
Total non-operating expense	1,493,618	3,073,598	(1,208,338)	(1,334,736)	285,280	1,738,862
Loss before provision for income tax	(3,342,037)	(1,442,265)	(4,820,149)	(4,610,199)	(8,162,186)	(6,052,464)
Provision for income tax	–	–	–	–	–	–
Net loss	$(3,342,037)	$(1,442,265)	$(4,820,149)	$(4,610,199)	$(8,162,186)	$(6,052,464)
Loss per share:						
Basic	$(0.00)	$(0.00)	$(0.00)	$(0.00)	$(0.01)	$(0.00)
Diluted	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Weighted average shares outstanding:						
Basic	1,478,231,834	1,478,231,834	1,543,519,167	1,543,519,167	1,510,945,682	1,510,945,682
Diluted	1,478,231,834	1,478,231,834	1,543,519,167	1,543,519,167	1,510,945,682	1,510,945,682

2011 Quarterly Consolidated Statements of Operations (unaudited)

	September 30, 2011 Three Months Ended		Nine Months Ended		December 31, 2011 Three Months Ended	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
Revenue	$132,805	$132,805	$440,181	$440,181	$66,238	$66,238
Cost of revenue	16,650	16,650	321,050	321,050	22,900	22,900
Gross profit	116,155	116,155	119,131	119,131	43,338	43,338
Operating expenses:						
Research and development	4,035,722	4,119,918	7,042,766	7,206,482	2,910,458	2,547,277
General and administrative expenses	2,976,219	890,058	8,125,473	5,303,652	2,899,986	2,132,057
Loss on settlement of litigation	–	–	294,144	294,144	–	–
Total operating expenses	7,011,941	5,009,976	15,462,383	12,804,278	5,810,444	4,679,334
Loss from operations	(6,895,786)	(4,893,821)	(15,343,252)	(12,685,147)	(5,767,106)	(4,635,996)
Non-operating income (expense):						
Interest income	5,833	5,833	28,382	28,382	6,732	6,732
Interest expense and late fees	(275,378)	(275,378)	(1,229,259)	(1,229,259)	(281,434)	(281,434)
Finance gain (cost)	(48,197,130)	(43,526,130)	(51,068,739)	(46,397,739)	(9,765,431)	(8,586,431)
Loss attributable to equity method investments	(820,000)	(820,000)	(820,000)	(820,000)	–	–
Adjustments to fair value of unsettled warrant liability	–	2,275,172	–	3,728,754	–	4,234,347
	3,661,432	3,661,432	7,749,653	7,749,653	3,695,335	3,695,335

Adjustments to fair value of derivatives						
Total non-operating expense	(45,625,243)	(38,679,071)	(45,339,963)	(36,940,209)	(6,344,798)	(931,451)
Loss before provision for income tax	(52,521,029)	(43,572,892)	(60,683,215)	(49,625,356)	(12,111,904)	(5,567,447)
Provision for income tax	–	–	–	–	–	–
Net loss	$(52,521,029)	$(43,572,892)	$(60,683,215)	$(49,625,356)	$(12,111,904)	$(5,567,447)
Loss per share:						
Basic	$(0.03)	$(0.03)	$(0.04)	$(0.03)	$(0.01)	$(0.00)
Diluted	(0.03)	(0.03)	(0.04)	(0.03)	(0.01)	(0.00)
Weighted average shares outstanding:						
Basic	1,613,530,283	1,613,530,283	1,546,379,685	1,546,379,685	1,547,852,307	1,547,852,307
Diluted	1,613,530,283	1,613,530,283	1,546,379,685	1,546,379,685	1,547,852,307	1,547,852,307

2013 Quarterly Consolidated Statements of Cash Flows (unaudited)

	Three Months Ended March 31, 2013		Six Months Ended June 30, 2013		Nine Months Ended September 30, 2013	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net loss	$(6,413,041)	$(6,510,637)	$(13,024,387)	$(13,404,693)	$(18,729,509)	$(19,150,428)
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation	17,852	17,852	37,702	37,702	64,320	64,320
Amortization of deferred charges	34,359	34,359	81,218	81,218	96,828	96,828
Amortization of deferred revenue	(87,781)	(87,781)	(145,999)	(145,999)	(185,467)	(185,467)
Redeemable preferred stock dividend accrual	34,069	34,069	43,873	43,873	43,873	43,873
Stock based compensation	1,018,060	1,132,624	1,793,884	2,031,005	2,650,530	3,059,298
Amortization of deferred issuance costs	198,685	198,685	303,765	303,765	403,160	403,160
Amortization of discounts	171,157	171,157	326,770	326,770	414,396	414,396
Adjustments to fair value of unsettled warrant obligation	–	613,032	–	1,169,185	–	714,151
Adjustments to fair value of derivatives	(166,933)	(166,933)	(224,646)	(224,646)	(371,255)	(371,255)
Shares of common stock issued for compensation	420,955	420,955	849,659	849,659	1,272,363	1,272,363
Non-cash financing costs	(389,700)	(1,019,700)	(128,233)	(1,154,233)	(128,233)	(830,233)
Gain on debt extinguishment	–	–	(438,587)	(438,587)	(438,587)	(438,587)
Options issued for consulting services	10,418	10,418	22,145	22,145	32,550	32,550
Changes in operating assets and liabilities:						
Grants receivable	–	–	–	–	70,740	70,740
Prepaid expenses and other assets	(382,327)	(382,327)	(210,873)	(210,873)	(847,021)	(847,021)
Accounts payable and other liabilities	(2,742,221)	(2,742,221)	(1,769,780)	(1,769,780)	(1,759,433)	(1,759,433)
Net cash used in operating activities	(8,276,448)	(8,276,448)	(12,483,489)	(12,483,489)	(17,410,745)	(17,410,745)

CASH FLOWS FROM INVESTING ACTIVITIES:						
Purchases of property and equipment	(98,386)	(98,386)	(434,598)	(434,598)	(586,091)	(586,091)
Payment of lease deposits	(8,805)	(8,805)	(8,364)	(8,364)	(36,895)	(36,895)
Net cash used in investing activities	(107,191)	(107,191)	(442,962)	(442,962)	(622,986)	(622,986)
CASH FLOWS FROM FINANCING ACTIVITIES:						
Proceeds from issuance of common stock	5,253,221	5,253,221	11,748,653	11,748,653	16,844,532	16,844,532
Repayment of senior secured convertible debentures	–	–	(600,000)	(600,000)	(600,000)	(600,000)
Net cash provided by financing activities	5,253,221	5,253,221	11,148,653	11,148,653	16,244,532	16,244,532
Net decrease in cash and cash equivalents	(3,130,418)	(3,130,418)	(1,777,798)	(1,777,798)	(1,789,199)	(1,789,199)
Cash and cash equivalents, beginning of period	7,241,852	7,241,852	7,241,852	7,241,852	7,241,852	7,241,852
Cash and cash equivalents, end of period	$4,111,434	$4,111,434	$5,464,054	$5,464,054	$5,452,653	$5,452,653

2012 Quarterly Consolidated Statements of Cash Flows (unaudited)

	Three Months Ended March 31, 2012		Six Months Ended June 30, 2012		Nine Months Ended September 30, 2012	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net loss	$(5,712,490)	$(11,754,470)	$(9,671,933)	$(15,405,283)	$(18,180,184)	$(24,031,577)
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation	12,091	12,091	25,440	25,440	35,541	35,541
Amortization of deferred charges	15,609	15,609	31,218	31,218	46,827	46,827
Amortization of deferred revenue	(55,685)	(55,685)	(273,869)	(273,869)	(342,053)	(342,053)
Redeemable preferred stock dividend accrual	31,308	31,308	65,583	65,583	100,409	100,409
Stock based compensation	1,100,998	5,026,982	2,093,657	5,940,991	2,892,403	6,854,031
Amortization of deferred issuance costs	200,893	200,893	401,786	401,786	604,887	604,887
Amortization of discounts	40,123	40,123	80,247	80,247	120,813	120,813
Adjustments to fair value of unsettled warrant obligation	–	315,996	–	(1,263,984)	–	(360,235)
Adjustments to fair value of derivatives	141,599	141,599	(592,482)	(592,482)	(256,282)	(256,282)
Shares of common stock issued for compensation	421,642	421,642	840,033	840,033	–	–
Non-cash financing costs	(115,827)	1,684,173	(3,671,081)	(521,081)	1,263,676	3,513,676
Gain on debt extinguishment	–	–	–	–	(779,481)	(779,481)
Options issued for consulting services	29,172	29,172	38,571	38,571	51,122	51,122
Changes in operating assets and liabilities:						
Grants receivable	–	–	–	–	(140,046)	(140,046)
Prepaid expenses and other assets	41,986	41,986	118,536	118,536	145,784	145,784
Accounts payable and other liabilities	(967,204)	(967,204)	2,798,092	2,798,092	2,881,360	2,881,360
	(4,815,785)	(4,815,785)	(7,716,202)	(7,716,202)	(11,555,224)	(11,555,224)

Net cash used in operating activities						
CASH FLOWS FROM INVESTING ACTIVITIES:						
Purchases of property and equipment	(9,177)	(9,177)	(24,269)	(24,269)	(10,269)	(10,269)
Net cash used in investing activities	(9,177)	(9,177)	(24,269)	(24,269)	(10,269)	(10,269)
CASH FLOWS FROM FINANCING ACTIVITIES:						
Proceeds from issuance of preferred stock	2,500,000	2,500,000	4,500,000	4,500,000	6,000,000	6,000,000
Proceeds from issuance of common stock	–	–	–	–	800,000	800,000
Repayment of senior secured convertible debentures	–	–	–	–	(83,500)	(83,500)
Net cash provided by financing activities	2,500,000	2,500,000	4,500,000	4,500,000	6,716,500	6,716,500
Net decrease in cash and cash equivalents	(2,324,962)	(2,324,962)	(3,240,471)	(3,240,471)	(4,848,993)	(4,848,993)
Cash and cash equivalents, beginning of period	13,103,007	13,103,007	13,103,007	13,103,007	13,103,007	13,103,007
Cash and cash equivalents, end of period	$10,778,045	$10,778,045	$9,862,536	$9,862,536	$8,254,014	$8,254,014

2011 Quarterly Consolidated Statements of Cash Flows (unaudited)

	Three Months Ended March 31, 2011		Six Months Ended June 30, 2011		Nine Months Ended September 30, 2011		Year Ended Decemb 2011	
	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As Restated	As Previously Reported	As R
CASH FLOWS FROM OPERATING ACTIVITIES:								
Net loss	$(3,342,037)	$(1,442,265)	$(8,162,186)	$(6,052,464)	$(60,683,215)	$(49,625,356)	$(72,795,119)	$(55
Adjustments to reconcile net loss to net cash used in operating activities:								
Depreciation	21,285	21,285	38,394	38,394	53,949	53,949	67,161	67,
Amortization of deferred charges	22,900	22,900	45,800	45,800	68,700	68,700	91,600	91,
Amortization of deferred revenue	(153,688)	(153,688)	(307,376)	(307,376)	(415,231)	(415,231)	(506,419)	(50
Redeemable preferred stock dividend accrual	28,149	28,149	59,301	59,301	90,953	90,953	122,605	122
Stock based compensation	362,695	42,903	741,946	85,806	2,831,250	173,145	3,856,501	67,
Amortization of deferred issuance costs	594,647	594,647	795,540	795,540	998,641	998,641	1,201,741	1,2
Amortization of discounts	58,913	58,913	94,022	94,022	132,736	132,736	180,172	180
Adjustments to fair value of unsettled warrant obligation	–	(1,579,980)	–	(1,453,582)	–	(3,728,754)	–	(7,
Adjustments to fair value of derivatives	(4,789,419)	(4,789,419)	(4,088,221)	(4,088,221)	(7,749,653)	(7,749,653)	(11,444,988)	(11
	590,438	590,438	475,900	475,900	475,900	475,900	475,900	475

Shares of common stock issued for services								
Shares of common stock issued for compensation	–	–	423,138	423,138	2,025,658	2,025,658	2,673,960	2,6
Loss on settlement of litigation	294,144	294,144	294,144	294,144	294,144	294,144	294,144	294
Non-cash financing costs	2,625,875	2,625,875	2,871,609	2,871,609	51,068,739	46,397,739	60,834,170	54,
Amortization of deferred joint venture obligations	(3,265)	(3,265)	–	–	–	–	(6,870)	(6,
Options issued for consulting services	664,944	664,944	769,347	769,347	794,714	794,714	834,443	834
Changes in operating assets and liabilities:								
Grants receivable	–	–	–	–	(24,950)	(24,950)	–	–
Prepaid expenses and other assets	(36,999)	(36,999)	(344,497)	(344,497)	(278,248)	(278,248)	(241,248)	(24
Accounts payable and other liabilities	(317,082)	(317,082)	(396,056)	(396,056)	(512,260)	(512,260)	734,960	734
Net cash used in operating activities	(3,378,500)	(3,378,500)	(6,689,195)	(6,689,195)	(10,828,173)	(10,828,173)	(13,627,287)	(13
CASH FLOWS FROM INVESTING ACTIVITIES:								
Purchases of property and equipment	(19,072)	(19,072)	(36,830)	(36,830)	(36,830)	(36,830)	(36,830)	(36
Net cash used in investing activities	(19,072)	(19,072)	(36,830)	(36,830)	(36,830)	(36,830)	(36,830)	(36
CASH FLOWS FROM FINANCING ACTIVITIES:								

Proceeds from exercise of warrants and options	1,258,136	1,258,136	2,950,940	2,950,940	3,377,715	3,377,715	3,377,715	3,3
Proceeds from issuance of preferred stock	–	–	4,000,000	4,000,000	5,500,000	5,500,000	7,500,000	7,5
Net cash provided by financing activities	1,258,136	1,258,136	6,950,940	6,950,940	8,877,715	8,877,715	10,877,715	10,
Net decrease in cash and cash equivalents	(2,139,436)	(2,139,436)	224,915	224,915	(1,987,288)	(1,987,288)	(2,786,402)	(2,
Cash and cash equivalents, beginning of period	15,889,409	15,889,409	15,889,409	15,889,409	15,889,409	15,889,409	15,889,409	15,
Cash and cash equivalents, end of period	$13,749,973	$13,749,973	$16,114,324	$16,114,324	$13,902,121	$13,902,121	$13,103,007	$13,

Selected operating results for the quarters ended 2013, 2012 and 2011

	For the Quarter Ended			
	March 31, 2013 **(restated)**	June 30, 2013 **(restated)**	September 30, 2013 **(restated)**	December 31, 2013
Revenue	$87,781	$58,268	$39,468	$39,468
Loss from operations	(5,879,006)	(5,586,704)	(6,257,907)	(11,984,290)
Net loss	(6,510,637)	(6,894,056)	(5,745,735)	(11,871,820)
Loss per share:				
Basic	$(0.00)	$(0.00)	$(0.00)	$(0.00)
Diluted	(0.00)	(0.00)	(0.00)	(0.00)

	For the Quarter Ended			
	March 31, 2012 **(restated)**	June 30, 2012 **(restated)**	September 30, 2012 **(restated)**	December 31, 2012 **(restated)**
Revenue	$55,685	$218,184	$68,184	$124,434
Loss from operations	(9,345,455)	(4,399,344)	(5,119,837)	(6,378,115)
Net loss	(11,754,470)	(3,650,813)	(8,626,294)	(10,552,538)
Loss per share:				
Basic	$(0.01)	$(0.00)	$(0.00)	$(0.00)
Diluted	(0.01)	(0.00)	(0.00)	(0.00)

	For the Quarter Ended			
	March 31, 2011 **(restated)**	June 30, 2011 **(restated)**	September 30, 2011 **(restated)**	December 31, 2011 **(restated)**
Revenue	$153,688	$153,688	$132,805	$66,238
Loss from operations	(4,515,863)	(3,275,463)	(4,893,821)	(4,635,996)
Net loss	(1,442,265)	(4,610,199)	(43,572,892)	(5,567,447)
Loss per share:				
Basic	$(0.00)	$(0.00)	$(0.03)	$(0.00)
Diluted	(0.00)	(0.00)	(0.03)	(0.00)