BIOTIME INC
Form 10-K
February 17, 2010

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2009

OR

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

For the transition period from_____ to _____

Commission file number 1-12830

BioTime, Inc.
(Exact name of registrant as specified in its charter)

California	94-3127919
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code (510) 521-3390

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

Title of class	Common Shares, no par value
Title of class	Common Share Purchase Warrants

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. £

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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.

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

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

The approximate aggregate market value of voting common shares held by non-affiliates computed by reference to the price at which common shares were last sold as of June 30, 2009 was $41,579,851. Shares held by each executive officer and director and by each person who beneficially owns more than 5% of the outstanding common shares have been excluded in that such persons may under certain circumstances be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of common shares outstanding as of February 1, 2010 was 33,689,253

Documents Incorporated by Reference

Portions of Proxy Statement for 2010 Annual Meeting of Shareholders are incorporated by reference in Part III

BioTime, Inc.

Table of Contents

			Page Number
Part I.	Financial Information		
	Item 1 -	Business	3
	Item 2 -	Properties	34
	Item 3 -	Legal Proceedings	34
	Item 4 -	Submission of matters to a Vote of Security Holders	34
Part II.	Other Information		
	Item 5 -	Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	37
	Item 6 -	Selected Financial Data	39
	Item 7 -	Management's Discussion and Analysis of Financial Condition and Results of Operations	39
	Item 7A -	Quantitative and Qualitative Disclosures about Market Risk	46
	Item 8 -	Financial Statements and Supplementary Data	48
	Item 9 -	Changes In and Disagreements with Accountants on Accounting and Financial Disclosure	72
	Item 9A(T) -	Controls and Procedures	72
Part III.	Item 10 -	Directors, Executive Officers, and Corporate Governance	75
	Item 11 -	Executive Compensation	75
	Item 12 -	Security Ownership of Certain Beneficial Owners andManagement, and Related Stockholder Matters	75
	Item 13 -	Certain Relationships and Related Transactions, and Director Independence	76
	Item 14 -	Principal Accounting Fees and Services	76

Item 15 -	Exhibits, Financial Statement Schedules	77
Signatures		81

Table of Contents

PART I

Statements made in this Form 10-K that are not historical facts may constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those discussed. Words such as “expects,” “may,” “will,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates,” and similar expressions identify forward-looking statements. See Note 1 to Financial Statements.

Item 1. Business

Overview

We are a biotechnology company engaged in two areas of biomedical research and product development. Our first business segment is blood plasma volume expanders and related technology for use in surgery, emergency trauma treatment, and other applications. Our lead blood plasma expander product, Hextend®, is a physiologically balanced intravenous solution used in the treatment of hypovolemia. Hypovolemia is a condition caused by low blood volume, often from blood loss during surgery or from injury. Hextend maintains circulatory system fluid volume and blood pressure and keeps vital organs perfused during surgery and trauma care.

Our second business segment is regenerative medicine. Regenerative medicine refers to therapies based on human embryonic stem (“hES”) cell technology designed to rebuild cell and tissue function lost due to degenerative disease or injury. These novel stem cells provide a means of manufacturing every cell type in the human body and therefore show considerable promise for the development of a number of new therapeutic products.

The initial focus of our efforts in the regenerative medicine field has been the development and sale of advanced human stem cell products and technology that can be used by researchers at universities and other institutions, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. Research-only products generally can be marketed without regulatory (FDA) approval, and are therefore relatively near-term business opportunities when compared to therapeutic products. These products are currently being marketed through our wholly owned subsidiary, Embryome Sciences, Inc.

During October 2009 we initiated development programs for human therapeutic applications of hES cells, focused primarily on the treatment of cancer, ophthalmologic, skin, musculo-skeletal system, and hematologic diseases. Cancer research and development programs will be conducted in the United States by our subsidiary OncoCyte Corporation, while BioTime Asia, Limited, a subsidiary formed as a Hong Kong corporation, will conduct research and development programs in the People’s Republic of China for the treatment of cancer and other diseases.

Table of Contents

During 2009, we were awarded a $4,721,706 grant from the California Institute of Regenerative Medicine ("CIRM") for a stem cell research project related to our ACTCellerate™ embryonic stem cell technology that will address the need for industrial scale production of purified therapeutic cells for human therapeutic uses.

Human embryonic stem cell technology is approximately 10 years old and evolving rapidly. As a result, we cannot accurately forecast the amount of revenue that the new products we offer might generate.

Hextend® and PentaLyte® are registered trademarks of BioTime, Inc., and ESpan™, ReCyte™, and Espy™ are trademarks of Embryome Sciences, Inc. ACTCellerate™ is a trademark licensed to Embryome Sciences, Inc. by Advanced Cell Technology, Inc.

Stem Cells and Products for Regenerative Medicine Research

We are developing products and technology for use in the emerging field of regenerative medicine. Regenerative medicine refers to therapies based on hES cell and induced pluripotent stem ("iPS") cell technology. Because these cells have the ability to transform into all of the cells of the human body (a property called pluripotency), they may provide a means of producing a host of new products of interest to medical researchers. For example, it may be possible to use hES and iPS cells to develop new cell lines designed to rebuild cell and tissue function lost due to degenerative disease or injury, and new cell lines for basic research and discovery of new drugs. Since embryonic stem cells can now be derived in a noncontroversial manner, including through the use of iPS technology, they are increasingly likely to be utilized in a wide array of future research programs in the attempt to restore the function of organs and tissues damaged by degenerative diseases such as heart failure, stroke, Parkinson's disease, macular degeneration, and diabetes, as well as many others.

The initial focus of our efforts in the regenerative medicine field has been the development and sale of advanced human stem cell products and technologies that can be used by researchers at universities and other institutions, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. By initially focusing our resources on products and technologies that will be used by researchers and drug developers at larger institutions and corporations, we believe that we will be able to commercialize products more quickly, and using less capital, than if we were developing therapeutic products ourselves.

Embryome Database

The future challenge for regenerative medicine is to navigate the complexity of human development, to identify the many hundreds of cell types originating from embryonic stem cells, and to manufacture purified populations of desired cell types. To assist researchers in attaining these goals, we are creating a detailed "map" of the human and mouse embryome that will take the form of a relational database intended to permit researchers to chart the cell lineages of human development, the genes expressed in those cell types, and antigens present on the cell surface of those cells that can be used in purification. Our embryome map database is now available at our website www.embryome.com.

Table of Contents

Progenitor and hES Cell Lines

When Embryome Sciences acquired a license to use ACTCellerate™ technology, it also acquired the rights to market more than 140 novel human cell types made using ACTCellerate™ technology. ACTCellerate™ technology allows the rapid isolation of novel, highly-purified embryonic progenitor cells ("hEPCs"). These hEPCs are cells that are intermediate in the developmental process between embryonic stem cells and fully differentiated cells. The hEPCs may possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapy. The hEPCs are relatively easy to manufacture on a large scale and in a purified state, which may make it advantageous to work with these cells compared to the direct use of hES or iPS cells.

Embryome Sciences has entered into an agreement under which Millipore Corporation is a worldwide distributor of ACTCellerate™ human progenitor cell lines. Millipore's initial offering of Embryome Sciences' products consists of six novel progenitor cell lines and optimized ESpan™ growth media for the in vitro propagation of each progenitor cell line, which are being marketed and distributed on a worldwide basis. The companies anticipate jointly launching 29 additional cell lines and associated ESpan™ growth media within the coming 12 months. The Embryome Sciences products distributed by Millipore may also be purchased directly from Embryome Sciences at Embryome.com.

On April 29, 2009, CIRM awarded us a $4,721,706 grant for a stem cell research project related to our ACTCellerate™ technology. Our grant project is titled "Addressing the Cell Purity and Identity Bottleneck through Generation and Expansion of Clonal Human Embryonic Progenitor Cell Lines."

Our CIRM-funded research project will address the need for industrial scale production of purified therapeutic cells. hES and iPS cells are difficult and costly to manufacture in large quantities, especially with the purity required for therapeutic use. Purity and precise identification of the desired therapeutic cells are essential for cell therapy because, unlike a drug which may persist in the body for a matter of hours or days, a cell can persist in the body for a lifetime. The pluripotency that allows hES cells to differentiate into all types of cells also poses the problem of assuring that all hES cells in a cultured batch differentiate into the desired type of body cell. Contamination of hES- or iPS-derived cells with the wrong cells could lead to toxicities resulting from normal but inappropriate tissue growth or tumor formation. For this reason, our funded research will use ACTCellerate™ technology to manufacture hEPCs rather than hES or iPS cells.

Table of Contents

Because our hEPCs are clonal, meaning that they are derived from a single cell, they have the potential to grow as a highly purified cell line. However, the production of hEPCs for human therapeutic use will require a means of ascertaining that the cells being used are in fact the correct cells. Our research program proposes to map the surface markers on hEPC lines so that we can identify a molecular signature specific to a given hEPC line. The molecular signature will be the key to verifying the correct identity of cells intended to be used in therapy, and will facilitate purification of hEPCs from any hES or iPS cell line. We will seek to identify antibodies and other cell purification reagents that will reveal the molecular signature of the desired hEPCs.

The overall objective of the research project is to generate tools useful in applying ACTCellerate™ technology to the manufacture of patient-specific therapeutic products. We already have isolated and expanded a number of hEPCs that may be used in the funded research program. The successful completion of our proposed project will provide well-characterized hEPCs that are precursors of therapeutic cells such as nerve, blood vessel, heart muscle, cartilage, and skin, as well as other cell types.

The CIRM funding for this research project will be paid over a period of three years, with $1.6 million of the $4.7 million grant expected to be available during the first 12 months. We received the first two quarterly payments from CIRM, totaling $790,192, during the second half of 2009.

hES Cells Carrying Genetic Diseases

Embryome Sciences has acquired an array of hES cell lines carrying inherited genetic diseases such as cystic fibrosis and muscular dystrophy. Study of these cell lines will enable researchers to better understand the mechanisms involved in causing the disease states, which may in turn expedite the search for potential treatments. We intend to offer these hES cell lines for sale online at Embryome.com during 2010.

ESpan™ Cell Growth Media

We and Millipore are marketing a line of cell growth media products called ESpan™. These growth media are optimized for the growth of hEPC types. Cells need to be propagated in liquid media, in both the laboratory setting where basic research on stem cells is performed, and in the commercial sector where stem cells will be scaled up for the manufacture of cell-based therapies or for the identification of new drugs. We expect that rather than propagating hES cells in large quantities, many end users will instead propagate cells using media optimized for the propagation of hEPCs created from hES cells.

Table of Contents

ESpy™ Cell Lines

Additional new products that we have targeted for development are ESpy™ cell lines, which will be derivatives of hES cells and will emit beacons of light. The ability of the ESpy cells to emit light will allow researchers to track the location and distribution of the cells in both in vitro and in vivo studies.

Other New Research Products Planned

We also plan to bring to market other new growth and differentiation factors and kits that will permit researchers to manufacture specific cell types from embryonic stem cells, and purification tools useful to researchers in the quality control of products for regenerative medicine. As new products are developed, they will become available for purchase on Embryome.com.

Cell-Based Cancer Therapies and Other Therapeutic Products

We have organized OncoCyte Corporation and BioTime Asia, Limited for the purpose of developing novel therapies for the treatment of human diseases based on stem cell technology.

OncoCyte will seek to develop novel therapeutics for the treatment of cancer based on stem cell technology. We and Embryome Sciences will license certain technology to OncoCyte, including early patent filings on targeting stem cells to malignant tumors, for use in the field of cell-based cancer therapies. OncoCyte's new therapeutic strategy and goal will be to utilize human embryonic stem cell technology to create genetically modified stem cells capable of homing to specific malignant tumors while carrying genes that can cause the destruction of the cancer cells.

We presently own a 74% equity interest in OncoCyte, which has received $4,000,000 of equity capital from two investors who now own 26% of the outstanding shares of OncoCyte. We plan to provide additional equity capital to OncoCyte as funding for that purpose becomes available to us.

BioTime Asia will initially seek to develop the therapeutic products for the treatment of ophthalmologic, skin, musculo-skeletal system, and hematologic diseases, including the targeting of genetically modified stem cells to tumors as a novel means of treating currently incurable forms of cancer.

We have engaged the services of Dr. Daopei Lu to aid BioTime Asia in arranging and managing clinical trials of therapeutic stem cell products. Dr. Lu is a world-renowned hematologist and expert in the field of hematopoietic stem cell transplants who pioneered the first successful syngeneic bone marrow stem cell transplant in the People's Republic of China to treat aplastic anemia and the first allogeneic peripheral blood stem cell transplant to treat acute leukemia. Nanshan Memorial Medical Institute Limited ("NMMI"), a private Hong Kong company, has entered into an agreement with us under which NMMI has become a minority shareholder in BioTime Asia and will provide BioTime Asia with its initial laboratory facilities and an agreed number of research personnel, and will arrange financing for clinical trials.

Table of Contents

BioTime and Embryome Sciences will license to BioTime Asia the rights to use certain stem cell technology, and will sell to BioTime Asia stem cell products for therapeutic use and for resale as research products. To the extent permitted by law, BioTime Asia will license back to us for use outside of the People's Republic of China any new technology that BioTime Asia might develop or acquire.

Our obligations are subject to certain conditions and contingencies, including the completion of feasibility studies for the venture. Either we or NMMI may terminate the agreement if certain clinical trial milestones are not met, including the commencement of the first clinical trial of a therapeutic stem cell product within two years.

There is no assurance that either OncoCyte or BioTime Asia will be successful in developing any new technology or stem cell products, or that any technology or products that they may develop will be proven safe and effective in treating cancer or other diseases in humans, or will be successfully commercialized. Our potential therapeutic products are at a very early stage of preclinical development. Before any clinical trials can be conducted by OncoCyte or BioTime Asia, those subsidiaries would have to compile sufficient laboratory test data substantiating the characteristics and purity of the stem cells, conduct animal studies, and then obtain all necessary regulatory and clinical trial site approvals, and assemble a team of physicians and statisticians for the trials.

Licensed Stem Cell Technology and Stem Cell Product Development Agreements

We have obtained the right to use stem cell technology that we believe has great potential in our product development efforts, and that may be useful to other companies that are engaged in the research and development of stem cell products for human therapeutic and diagnostic use.

Wisconsin Alumni Research Foundation

We have entered into a Commercial License and Option Agreement with Wisconsin Alumni Research Foundation ("WARF"). The WARF license permits us to use certain patented and patent pending technology belonging to WARF, as well as certain stem cell materials, for research and development purposes, and for the production and marketing of "research products" and "related products." "Research products" are products used as research tools, including in drug discovery and development. "Related products" are products other than research products, diagnostic products, or therapeutic products. "Diagnostic products" are products or services used in the diagnosis, prognosis, screening, or detection of disease in humans. "Therapeutic products" are products or services used in the treatment of disease in humans.

Table of Contents

Under the WARF license agreement, we will pay WARF a license fee of $225,000 in cash and $70,000 worth of our common shares. The first installment of cash in the amount of $10,000 was paid during February 2008, the common shares were issued during March 2009, and the remaining $215,000 is due on the earlier of (i) thirty (30) days after we raise $5,000,000 or more of new equity financing, or (ii) March 2, 2010. A maintenance fee of $25,000 will be due annually on March 2 of each year during the term of the WARF License beginning March 2, 2010.

We will pay WARF royalties on the sale of products and services under the WARF license. The royalty will be 4% on the sale of research products and 2% on the sale of related products. The royalty is payable on sales by us or by any sublicensee. The royalty rate is subject to certain reductions if we also become obligated to pay royalties to a third party in order to sell a product.

We will also pay WARF $25,000 toward reimbursement of the costs associated with preparing, filing, and maintaining the licensed WARF patents. That fee is payable in two installments. The first installment of $5,000 was paid during February 2008, and the remaining $20,000 is due on the earlier of (i) thirty (30) days after we raise $5,000,000 or more of new equity financing, or (ii) March 2, 2010.

We have an option to negotiate with WARF to obtain a license to manufacture and market therapeutic products, excluding products in certain fields of use. The issuance of a license for therapeutic products would depend upon our submission and WARF's acceptance of a product development plan, and our reaching agreement with WARF on the commercial terms of the license such as a license fee, royalties, patent reimbursement fees, and other contractual matters.

The WARF license shall remain in effect until the expiration of the latest expiration date of the licensed patents. However, we may terminate the WARF license prior to the expiration date by giving WARF at least ninety days written notice, and WARF may terminate the WARF license if we (a) fail to make any payment to WARF, (b) fail to submit any required report to WARF, (c) commit any breach of any other covenant in the WARF license that is not remedied within ninety days after written notice from WARF, or (d) commit any act of bankruptcy, become insolvent, are unable to pay our debts as they become due, file a petition under any bankruptcy or insolvency act, or have any such petition filed against us which is not dismissed within sixty days, or offers its creditors any component of the patents or materials covered by the WARF license.

ACTCellerate™ Technology

We have entered into a license agreement with Advanced Cell Technology, Inc. ("ACT") under which we acquired exclusive world-wide rights to use ACT's "ACTCellerate" technology for methods to accelerate the isolation of novel cell strains from pluripotent stem cells. The licensed rights include pending patent applications, know-how, and existing cells and cell lines developed using the technology.

Table of Contents

The licensed technology is designed to provide a large-scale and reproducible method of isolating clonally purified hEPC lines, many of which may be capable of extended propagation in vitro. Initial testing suggests that the technology may be used to isolate at least 140 distinct clones that contain many previously uncharacterized cell types derived from all germ layers that display diverse embryo- and site-specific homeobox gene expression. Despite the expression of many oncofetal genes, none of the human embryonic progenitor cell lines tested led to tumor formation when transplanted into immunocompromised mice. The cell lines studied appear to have a finite replicative lifespan but have longer telomeres than most fetal- or adult-derived cells, which may facilitate their use in the manufacture of purified lineages for research and human therapy. Information concerning the technology was published in the May 2008 edition of the journal Regenerative Medicine.

We may use the licensed technology and cell lines for research purposes and for the development of therapeutic and diagnostic products for human and veterinary use. We also have the right to grant sublicenses.

We paid ACT a $250,000 license fee and will pay an 8% royalty on sales of products, services, and processes that utilize the licensed technology. Once a total of $1,000,000 of royalties has been paid, no further royalties will be due.

ACT may reacquire royalty free, worldwide licenses to use the technology for retinal pigment epithelial cells, hemangioblasts, and myocardial cells, on an exclusive basis, and for hepatocytes, on a non-exclusive basis, for human therapeutic use. ACT will pay us $5,000 for each license that it elects to reacquire.

iPS Technology

We have entered into a license agreement and a sublicense agreement with ACT under which we acquired world-wide rights to use an array of ACT technology and technology licensed by ACT from affiliates of Kirin Pharma Company, Limited (“Kirin”). The ACT license and Kirin sublicense permit the commercialization of products in human therapeutic and diagnostic product markets.

The licensed technology covers methods to transform cells of the human body, such as skin cells, into an embryonic state in which the cells will be pluripotent. This new technology is sometimes referred to as induced pluripotent stem cell (“iPS”) technology. Because iPS technology does not involve human embryos or egg cells, and classical cloning techniques are not employed, the use of iPS technology may eliminate some ethical concerns that have been raised in connection with the procurement and use of human embryonic stem cells in scientific research and product development.

Table of Contents

The portfolio of licensed patents and patent applications covers methods to produce iPS cells that do not carry viral vectors or added genes. Other iPS technology currently being practiced by other researchers utilizes viruses and genes that are likely incompatible with human therapeutic uses. We believe that technologies that facilitate the reprogramming of human cells to iPS cells without using viruses could be advantageous in the development of human stem cell products for use in medicine.

The Kirin sublicense covers patent application for methods for cloning mammals using reprogrammed donor chromatin or donor cells and methods for altering cell fate. These patent applications relate to technology to alter the state of a cell, such as a human skin cell, by exposing the cell's DNA to the cytoplasm of another reprogramming cell with differing properties. We may use this licensed technology for all human therapeutic and diagnostic applications.

A second series of patent applications licensed nonexclusively from ACT includes technologies for:

- the use of reprogramming cells that over-express RNAs for the genes OCT4, SOX2, Nanog, cMYC, and other factors known to be useful in iPS technology
- methods of resetting cell lifespan by extending the length of telomeres
- the use of the cytoplasm of undifferentiated cells to reprogram human cells
- the use of a cell bank of hemizygous O- cells
- methods of screening for differentiation agents
- stem cell-derived endothelial cells modified to disrupt tumor angiogenesis.

We may use this technology in commercializing the patents licensed under the Kirin Sublicense.

The ACT license also includes patent applications for other uses. One licensed patent application covers a method of differentiation of morula or inner cell mass cells and a method of making lineage-defective embryonic stem cells. That technology can be used in producing hEPCs without the utilization of hES cell lines. Another licensed patent application covers novel culture systems for ex vivo development that contains technology for utilizing avian cells in the production of stem cell products free of viruses and bacteria.

Table of Contents

ACT iPS License Provisions

Under the ACT license for iPS technology, we paid ACT a $200,000 license fee and we will pay a 5% royalty on sales of products, services, and processes that utilize the licensed technology. Once a total of $600,000 of royalties has been paid, no further royalties will be due. We will also pay 20% of any fees or other payments, other than equity investments, research and development costs, loans and royalties, received by us from sublicensing the ACT technology to third parties.

We may use the licensed technology and cell lines for research purposes and for the development of therapeutic and diagnostic products for human and veterinary use, excluding (a) human and non-human animal cells for commercial research use, including small molecule and other drug testing and basic research, and (b) human cells for therapeutic and diagnostic use in the treatment of human diabetes, liver diseases, retinal diseases and retinal degenerative diseases, other than applications involving the use of cells in the treatment of tumors where the primary use of the cells is the destruction or reduction of tumors and does not involve regeneration of tissue or organ function. The exclusions from the scope of permitted uses under the ACT license will lapse if ACT's license with a third party terminates or if the third party no longer has an exclusive license from ACT for those uses.

Our license to use some of the ACT iPS technology is non-exclusive, and is limited to use in conjunction with the technology sublicensed from ACT under the Kirin sublicense, and may not be sublicensed to third parties other than subsidiaries and other affiliated entities. We do have the right to grant sublicenses to the other licensed ACT technology.

We will have the right to prosecute the patent applications and to enforce all patents, at our own expense, except that ACT is responsible for prosecuting patent applications for the non-exclusively licensed technology at its own expense. We will have the right to patent any new inventions arising from the use of the licensed patents and technology.

We will indemnify ACT for any products liability claims arising from products made by us and our sublicensees.

The licenses will expire in twenty years or upon the expiration of the last to expire of the licensed patents, whichever is later.

Kirin Sublicense Provisions

Under the Kirin sublicense, we paid ACT a $50,000 license fee and will pay a 3.5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments, other than equity investments, research and development costs, and loans and royalties we may receive from sublicensing the Kirin technology to third parties. We will also pay to ACT or to an affiliate of Kirin, annually, the amount, if any, by which royalties payable by ACT under its license agreement with Kirin are less than the $50,000 annual minimum royalty due. Those payments will be credited against other royalties payable to ACT under the Kirin sublicense.

Table of Contents

We may use the sublicensed technology for the development of therapeutic and diagnostic human cell products, including both products made, in whole or in part, of human cells, and products made from human cells. We have the right to grant further sublicenses.

We will indemnify ACT for any products liability claims arising from products made by us and our sublicensees. The licenses will expire upon the expiration of the last to expire of the licensed patents, or May 9, 2016 if no patents are issued.

Lifeline

We have entered into a Product Production and Distribution Agreement with Lifeline for the production and marketing of hEPCs or hEPC lines, and products derived from those hEPCs. The products developed under the agreement with Lifeline will be produced and sold for research purposes, such as drug discovery and drug development uses.

The proceeds from the sale of products to certain distributors with which Lifeline has a pre-existing relationship will be shared equally by us and Lifeline, after deducting royalties payable to licensors of the technology used, and certain production and marketing costs. The proceeds from products produced for distribution by both us and Lifeline, and products produced by one party at the request of the other party, will be shared in the same manner. Proceeds from the sale of other products, which are produced for distribution by one party, generally will be shared 90% by the party that produced the product for distribution, and 10% by the other party after deducting royalties payable to licensors of technology used. In the case of the sale of these products, the party that produces the product and receives 90% of the sales proceeds will bear all of the production and marketing costs of the product.

The products will be produced using technology and stem cell lines licensed from WARF, technology developed by us, technology developed by Lifeline, and technology licensed from ACT. WARF and ACT will receive royalties from the sale of the products developed using their licensed technology and stem cells.

We paid Lifeline $250,000 to facilitate their product production and marketing efforts. We will be entitled to recover that amount from the share of product sale proceeds that otherwise would have been allocated to Lifeline.

Table of Contents

Stem Cell Agreement with Reproductive Genetics Institute

We have entered into a Stem Cell Agreement with Reproductive Genetics Institute ("RGI") pursuant to which we obtained the non-exclusive right to acquire RGI's proprietary stem cell lines. The Stem Cell Agreement grants us rights to market new hES lines selected by us from 294 hES lines derived by RGI. We will initially select 10 RGI hES cell lines, and may add additional cell lines at our option. We will receive starting cultures of the cell lines we select, and will scale up those cell lines for resale as research products. Because our rights are non-exclusive, RGI will retain the right to market and use its stem cell lines for its own account. RGI is a leading fertility center that screens embryos for genetic disorders, such as cystic fibrosis and muscular dystrophy prior to implantation. The RGI hES lines include both normal cells and 88 cell lines identified as carrying a host of inherited genetic disease genes, some of which we plan to sell as research products to universities and companies in the bio-science and pharmaceutical industries.

We will pay RGI a royalty in the amount of 7% of net sales on RGI derived cells sold for research purposes, such as the use of cells to test potential new drugs or diagnostic products. The Stem Cell Agreement requires us to sell the RGI cells for a minimum price of $7,500 per ampule of cells. We also agreed to sell to RGI any cells that we derive from RGI stem cells at a price equal to 50% of the lowest price at which we sell those cells to third parties.

We will be marketing the acquired cells for research purposes only. However, the Stem Cell Agreement allows us and RGI to develop therapeutic or diagnostic uses of the cells, subject to approval by a joint steering committee composed of Embryome Sciences and RGI officers. In the absence of an agreement by the steering committee for a different revenue sharing arrangement, and provided that we are successful in developing and commercializing one or more of those products for therapeutic or diagnostic uses, we would pay RGI a royalty based on net sales of each product. The royalty rate would be 50% of net sales of the product, minus one-half of any other royalties required to be paid to third parties. None of the RGI cells have been approved by the U.S. Food and Drug Administration or any equivalent foreign regulatory agency for use in the treatment of disease, and we do not have any specific plans for the development of RGI stem cells for use in the treatment or diagnosis of disease in humans.

We issued to RGI 32,259 of our common shares, no par value, as a license fee for the use of RGI's proprietary technology related to the first 10 cell types acquired by us under the Stem Cell Agreement. If we elect to acquire more than 10 cell types, we will issue to RGI an additional number of BioTime common shares having a market value of $5,000 for each additional cell type that we choose to acquire. The market value of our common shares will be based on the closing price of the shares on the NYSE Amex on the date that we elect to acquire the additional cell types.

Table of Contents

Plasma Volume Expanders and Related Products

Hextend

Our first product, Hextend, is a physiologically balanced blood plasma volume expander, used for the treatment of hypovolemia. Hypovolemia is a condition caused by low blood volume, often from blood loss during surgery or from injury. Hextend maintains circulatory system fluid volume and blood pressure and helps sustain vital organs during surgery. Hextend, approved for use in major surgery, is the only blood plasma volume expander that contains lactate, multiple electrolytes, glucose, and a medically approved form of starch called hetastarch. Hextend is sterile, so its use avoids the risk of infection. Health insurance reimbursements and HMO coverage now include the cost of Hextend used in surgical procedures.

Hextend is part of the U.S. Armed Forces Tactical Combat Casualty Care protocol and is used to treat battlefield casualties. Hextend is also currently being used by emergency room physicians to treat both hypovolemia subsequent to trauma and low blood pressure due to shock. After appropriate clinical testing and regulatory approval, it may be used by paramedics to treat acute blood loss in trauma victims being transported to the hospital.

Hextend is also being used in surgery with cardio-pulmonary bypass circuits. In order to perform heart surgery, the patient's heart must be stopped, and a mechanical apparatus is used to oxygenate and circulate the blood. The cardio-pulmonary bypass apparatus requires a blood compatible fluid such as Hextend to commence and maintain the process of diverting the patient's blood from the heart and lungs to the mechanical oxygenator and pump. In a clinical trial conducted, cardiac surgery patients treated with Hextend maintained more normal kidney function, experienced less pain and nausea, showed less deep venous thrombosis, avoided dialysis, and had shorter delay times to first meal compared to those treated with other fluids.

An important goal of the Hextend development program was to produce a product that can be used in multi-liter volumes. The safety related secondary endpoints targeted in the U.S. Phase III clinical study included those involving coagulation. We believe that the low incidence of adverse events related to blood clotting in the Hextend patients demonstrates that Hextend may be safely used in amounts exceeding 1.5 liters. An average of 1.6 liters of Hextend was used in the Phase III clinical trials, with an average of two liters for patients who received transfused blood products.

A recent independent study in hemodynamically unstable trauma patients conducted at the University of Miami Ryder Trauma Center reported that initial resuscitation with Hextend was associated with no obvious coagulopathy and reduced mortality compared to fluid resuscitation without Hextend.

Hextend is being distributed in the United States by Hospira, Inc. ("Hospira") and in South Korea by CJ CheilJedang Corp. ("CJ") under exclusive licenses from us.

Table of Contents

We are also developing another blood volume replacement product, PentaLyte®. It, like Hextend, has been formulated to maintain the patient's tissue and organ function by sustaining the patient's fluid volume and physiological balance.

PentaLyte

PentaLyte is our proprietary pentastarch-based synthetic plasma volume expander, designed especially for use when a faster elimination of the starch component is desired and acceptable. Although Hextend can be used in these cases, some physicians appear to prefer a solution which can be metabolized faster and excreted earlier when the longer term protection provided by Hextend is not required. PentaLyte combines the physiologically balanced Hextend formulation with pentastarch, which has a lower molecular weight and degree of substitution than the hetastarch used in Hextend. Plasma volume expanders containing pentastarch are currently widely used around the world. Our present plan is to seek approval of PentaLyte for use in the treatment of hypovolemia. We have conducted a Phase II clinical study using PentaLyte in cardiac surgery for that purpose. Our ability to complete clinical studies of PentaLyte will depend on our cash resources and the costs involved, which are not presently determinable.

Products for Hypothermic Surgery and Tissue Preservation

We have devoted a portion of our research and development efforts and funds on the development of a plasma volume replacement solution for use in hypothermic surgery, and a solution intended to permit the long term storage of tissues and potentially entire organs at very cold temperatures.

During open-heart surgery and surgical procedures for the treatment of certain cardiovascular conditions such as large aneurysms, cardiovascular abnormalities, and damaged blood vessels in the brain, surgeons must temporarily interrupt the flow of blood through the body. Interruption of blood flow can be maintained only for short periods of time at normal body temperatures because many critical organs, particularly the brain, are quickly damaged by the resultant loss of oxygen. Surgeons are already using Hextend and a variety of other solutions to carry out certain limited procedures involving shorter term (up to nearly one hour) arrest of brain and heart function at temperatures between 15º and 25° C. We had been developing HetaCool®, a plasma volume expander based on Hextend, to facilitate the cooling of a patient's body and maintaining body temperatures closer to the ice point for extended periods of time to facilitate complex, time consuming surgical procedures. We were also developing HetaFreeze® and other freeze-protective solutions to allow for the extension of time during which organs and tissues can be stored for future transplant or surgical grafting.

Due to the considerable costs of subsequent product development for HetaCool and HetaFreeze, and the relatively near-term opportunities we expect for our new products in the field of regenerative medicine, we plan to expend additional resources on research and development for HetaCool and HetaFreeze only if we are able to obtain funding targeted for those research programs or if we are able to enter into arrangements with co-developers able to finance additional product development.

Table of Contents

The Market for Plasma Volume Expanders

Approximately 10,000,000 surgeries take place in the United States each year, and blood transfusions are required in approximately 3,000,000 of those cases. Transfusions are also required to treat patients suffering severe blood loss due to traumatic injury. Many more surgical and trauma cases do not require blood transfusions but do involve significant bleeding that can place the patient at risk of suffering from shock caused by the loss of fluid volume (hypovolemia) and physiological balance. Whole blood and packed red cells generally cannot be administered to a patient until the patient's blood has been typed and sufficient units of compatible blood or red cells can be located. Periodic shortages of supply of donated human blood are not uncommon, and rare blood types are often difficult to locate. The use of human blood products also poses the risk of exposing the patient to blood-borne diseases such as AIDS and hepatitis.

Due to the risks and cost of using human blood products, even when a sufficient supply of compatible blood is available, physicians treating patients suffering blood loss are generally not permitted to transfuse red blood cells until the patient's level of red blood cells has fallen to a level known as the "transfusion trigger." During the course of surgery, while blood volume is being lost, the patient is infused with plasma volume expanders to maintain adequate blood circulation. During the surgical procedure, red blood cells are not generally replaced until the patient has lost approximately 45% to 50% of his or her red blood cells, thus reaching the transfusion trigger at which point the transfusion of red blood cells may be required. After the transfusion of red blood cells, the patient may continue to experience blood volume loss, which will be replaced with plasma volume expanders. Even in those patients who do not require a transfusion, physicians routinely administer plasma volume expanders to maintain sufficient fluid volume to permit the available red blood cells to circulate throughout the body and to maintain the patient's physiological balance.

Several units of fluid replacement products are often administered during surgery. The number of units will vary depending upon the amount of blood loss and the kind of plasma volume expander administered. Crystalloid products must be used in larger volumes than colloid products such as Hextend.

Uses and Benefits of Hextend and PentaLyte

Hextend and PentaLyte have been formulated to maintain the patient's tissue and organ function by sustaining the patient's fluid volume and physiological balance. Both products are composed of a hydroxyethyl starch, electrolytes, sugar, and lactate in an aqueous base. Hextend uses a high molecular weight hydroxyethyl starch (hetastarch), whereas PentaLyte uses a lower molecular weight hydroxyethyl starch (pentastarch). The hetastarch is retained in the blood longer than the pentastarch, which may make Hextend the product of choice when a larger volume of plasma expander or blood replacement solution for low temperature surgery is needed, or where the patient's ability to restore his own blood proteins after surgery is compromised. PentaLyte, with pentastarch, would be eliminated from the blood faster than Hextend and might be used when less plasma expander is needed or where the patient is more capable of quickly restoring lost blood proteins. We believe that by testing and bringing these products to the market, we can increase our market share by providing the medical community with solutions to match patients' needs.

Table of Contents

Certain clinical test results indicate that Hextend is effective at maintaining blood calcium levels when used to replace lost blood volume. Calcium can be a significant factor in regulating blood clotting and cardiac function. Clinical studies have also shown that Hextend maintains acid-base better than saline-based surgical fluids. We expect that PentaLyte will also be able to maintain blood calcium levels and acid-base balance based upon the fact that the electrolyte formulation of PentaLyte is identical to that of Hextend.

Albumin produced from human plasma is also used as plasma volume expander, but it is expensive and subject to supply shortages. Additionally, an FDA warning has cautioned physicians about the risk of administering albumin to seriously ill patients.

We have not attempted to synthesize potentially toxic and costly oxygen-carrying molecules such as hemoglobin because the loss of fluid volume and physiological balance may contribute as much to shock as the loss of the oxygen-carrying component of the blood. Surgical and trauma patients are routinely given supplemental oxygen and retain a substantial portion of their own red blood cells. Whole blood or packed red blood cells are generally not transfused during surgery or in trauma care until several units of plasma volume expanders have been administered and the patient's blood cell count has fallen to the transfusion trigger. Therefore, the lack of oxygen-carrying molecules in BioTime solutions should not pose a significant contraindication to use.

However, our scientists have conducted laboratory animal experiments in which they have shown that Hextend can be successfully used in conjunction with a hemoglobin-based oxygen carrier solution approved for veterinary purposes to completely replace the animal's circulating blood volume without any subsequent transfusion and without the use of supplemental oxygen. By diluting these oxygen carrier solutions, Hextend may reduce the potential toxicity and costs associated with the use of those products. Once such solutions have received regulatory approval and become commercially available, this sort of protocol may prove valuable in markets in parts of the developing world where the blood supply is extremely unsafe. These applications may also be useful in combat where logistics make blood use impracticable.

Table of Contents

Research and Development Strategy

A significant part of our business activities are devoted to research and development, focused primarily on the stem cell segment of our business. During 2008 and 2009, we spent $1,725,187 and $2,968,987, respectively, on research and development. While we utilize our own proprietary technology in both our plasma volume expander and stem cell research and development programs, we presently rely to a significant extent upon technology licensed from others in our stem cell research and development efforts. See “Licensed Stem Cell Technology and Stem Cell Product Development Agreements.”

Human embryonic stem cells are capable of becoming all of the thousands of different cell types in the body. Because embryonic stem cells can now be derived in a noncontroversial manner, including through the use of iPS technology, they are increasingly likely to be utilized in a wide array of future therapies to restore the function of organs damaged by degenerative diseases such as heart failure, stroke, and diabetes.

A portion of our current efforts in the regenerative medicine field are focused on the development and sale of advanced human stem cell products and technology that can be used by researchers at universities and other institutions, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. By focusing a portion of our resources on products and technology that will be used by researchers and drug developers at larger institutions and corporations, we believe that we will be able to commercialize products in less time and using less capital than will be required to develop therapeutic products.

In our CIRM-funded research project, we will work with hEPCs generated using our ACTCellerate™ embryonic stem cell technology. The hEPCs are relatively easy to manufacture on a large scale and in a purified state, which may make it advantageous to work with these cells compared to the direct use of hES or iPS cells. We will work on identifying antibodies and other cell purification reagents that may be useful in the production of hEPCs that can be used to develop pure therapeutic cells such as nerve, blood vessel, heart muscle, cartilage, and skin.

Through our subsidiaries, OncoCyte and BioTime Asia, we will attempt to develop human stem cell products for therapeutic uses. We and Embryome Sciences will license certain technology to OncoCyte and BioTime Asia for their research and development programs. OncoCyte will seek to utilize human embryonic stem cell technology to create genetically modified stem cells capable of homing to specific malignant tumors while carrying genes that can cause the destruction of the cancer cells. BioTime Asia will initially seek to develop the therapeutic products for the treatment of ophthalmologic, skin, musculo-skeletal system, and hematologic diseases, including the targeting of genetically modified stem cells to tumors to treat cancer.

Table of Contents

We have obtained the rights to use and market stem cell lines developed by other companies. We believe that obtaining rights to these cell lines has given us a "jump start" in assembling an array of products for stem cell research. Our plan is to produce these cells in commercial quantities and offer them for sale to researchers. We may also derive new stem cell lines, and we are working on the development of new products derived from human stem cells, such as ESpy™ cell lines, which will be derivatives of hES cells and will emit beacons of light. The light emitting property of the ESpy cells will allow researchers to track the location and distribution of the cells in both in vitro and in vivo studies.

We are also working to develop new growth and differentiation factors that will permit researchers to manufacture specific cell types from embryonic stem cells, and purification tools useful to researchers in quality control of products for regenerative medicine.

Licensing and Sale of Plasma Volume Expander Products

Hospira

Hospira has the exclusive right to manufacture and sell Hextend in the United States and Canada under a license agreement with us. Hospira is presently marketing Hextend in the United States. Hospira's license applies to all therapeutic uses other than those involving hypothermic surgery where the patient's body temperature is lower than 12°C ("Hypothermic Use"), or replacement of substantially all of a patient's circulating blood volume ("Total Body Washout").

Hospira pays us a royalty on total annual net sales of Hextend. The royalty rate is 5% plus an additional .22% for each $1,000,000 of annual net sales, up to a maximum royalty rate of 36%. The royalty rate for each year is applied on a total net sales basis. Hospira's obligation to pay royalties on sales of Hextend will expire on a country by country basis when all patents protecting Hextend in the applicable country expire and any third party obtains certain regulatory approvals to market a generic equivalent product in that country. The relevant composition patents begin to expire in 2014 and the relevant methods of use patents expire in 2019.

We have the right to convert Hospira's exclusive license to a non-exclusive license or to terminate the license outright if certain minimum sales and royalty payments are not met. In order to terminate the license outright, we would pay a termination fee in an amount ranging from the milestone payments we received to an amount equal to three times prior year net sales, depending upon when termination occurs. Hospira has agreed to manufacture Hextend for sale by us in the event that the exclusive license is terminated.

Hospira has certain rights to acquire additional licenses to manufacture and sell our other plasma expander products in their market territory. If Hospira exercises these rights to acquire a license to sell such products for uses other than Hypothermic Surgery or Total Body Washout, in addition to paying royalties, Hospira will be obligated to pay a license fee based upon our direct and indirect research, development, and other costs allocable to the new product. If Hospira desires to acquire a license to sell any of our products for use in Hypothermic Surgery or Total Body Washout, the license fees and other terms of the license will be subject to negotiation between the parties. For the purpose of determining the applicable royalty rates, net sales of any such new products licensed by Hospira will be aggregated with sales of Hextend. If Hospira does not exercise its right to acquire a new product license, we may manufacture and sell the product ourselves or we may license others to do so.

Table of Contents

The foregoing description of the Hospira license is a summary only and is qualified in all respects by reference to the full text of the Hospira license agreement.

CJ

CJ markets Hextend in South Korea under an exclusive license from us. CJ paid us a license fee to acquire their right to market Hextend. CJ also pays us a royalty on sales of Hextend. The royalty will range from $1.30 to $2.60 per 500 ml unit of product sold, depending upon the price approved by Korea's National Health Insurance. CJ is also responsible for obtaining the regulatory approvals required to manufacture and market PentaLyte, including conducting any clinical trials that may be required, and will bear all related costs and expenses.

The foregoing description of the CJ license is a summary only and is qualified in all respects by reference to the full text of the CJ license agreement.

Summit

We have entered into agreements with Summit to develop Hextend and PentaLyte in Japan, the People's Republic of China, and Taiwan. Summit had sublicensed to Maruishi Pharmaceutical Co., Ltd. ("Maruishi") the right to manufacture and market Hextend in Japan, and the right to manufacture and market Hextend and PentaLyte in China and Taiwan. However, Maruishi has withdrawn from the sublicense arrangement with Summit, and Summit has informed us that they intend to seek a replacement sublicensee.

A Phase III clinical trial using Hextend in surgery, funded by Maruishi, was conducted in Japan, but work on the trial has not been completed. Due to the withdrawal of Maruishi from its sublicense agreement, Summit will need to find a replacement sublicensee or other source of funding in order to complete the Phase III clinical study. Successful completion of the clinical study is required in order to seek regulatory approval to market Hextend in Japan.

The revenues from licensing fees, royalties, and net sales, and any other payments made for co-development, manufacturing, or marketing rights to Hextend and PentaLyte in Japan will be shared between BioTime and Summit as follows: 40% to us and 60% to Summit. Net sales means the gross revenues from the sale of a product, less rebates, discounts, returns, transportation costs, sales taxes and import/export duties. Summit paid us fees for the right to co-develop Hextend and PentaLyte in Japan, and Summit has also paid us a share of a sublicense fee payment from Maruishi.

Table of Contents

We will pay to Summit 8% of all net royalties that we receive from the sale of PentaLyte in the United States, plus 8% of any license fees that we receive in consideration of granting a license to develop, manufacture, and market PentaLyte in the United States. Net royalties means royalty payments received during a calendar year, minus the following costs and expenses incurred during such calendar year: (a) all taxes assessed (other than taxes determined with reference to our net income) and credits given or owed by us in connection with the receipt of royalties on the sale of PentaLyte in the United States, and (b) all fees and expenses payable by us to the United States Food and Drug Administration (directly or as a reimbursement of any licensee) with respect to PentaLyte.

Summit paid us a fee to acquire the China and Taiwan license. We also will be entitled to receive 50% of the royalties and milestone payments payable to Summit by any third-party sublicensee.

The foregoing description of the Summit agreement is a summary only and is qualified in all respects by reference to the full text of the Summit agreements.

Major Customers

During 2008 and 2009, all of our royalty revenues were generated through sales of Hextend by Hospira in the United States and by CJ in the Republic of Korea. We also earned license fees from CJ and Summit. The following table shows the relative portions of our Hextend and PentaLyte royalty and license fee revenues paid by Hospira, CJ, and Summit that were recognized during the past two fiscal years.

	% of Total Revenues for the Year ended December 31,	
Licensee	2009	2008
Hospira	73%	81%
CJ Corp.	17%	9%
Summit	10%	10%

Royalty Revenues and License Fees by Geographic Area

The following table shows the source of our 2008 and 2009 royalty and license fee revenues by geographic areas, based on the country of domicile of the licensee:

Table of Contents

	Revenues for Year ending December 31,	
Geographic Area	2009	2008
Domestic	$ 996,681	$ 1,203,453
Asia	376,173	277,999
Total Revenues	$ 1,372,854	$ 1,481,452

Manufacturing

Hospira manufactures Hextend for use in the North American market, and CJ manufactures Hextend for use in South Korea. Hospira and CJ have the facilities to manufacture Hextend and other BioTime products in commercial quantities. If Hospira and CJ choose not to manufacture and market other BioTime products, other manufacturers will have to be found that would be willing to manufacture products for us or any licensee of our products.

Facilities Required – Plasma Volume Expanders

Any products that are used in clinical trials for regulatory approval in the United States or abroad, or that are approved by the FDA or foreign regulatory authorities for marketing, have to be manufactured according to “good manufacturing practices” (“GMP”) at a facility that has passed regulatory inspection. In addition, products that are approved for sale will have to be manufactured in commercial quantities, and with sufficient stability to withstand the distribution process, and in compliance with such domestic and foreign regulatory requirements as may be applicable. The active ingredients and component parts of the products must be medical grade or themselves manufactured according to FDA-acceptable “good manufacturing practices.”

We do not have facilities to manufacture our plasma volume expander products in commercial quantities, or under GMP. Acquiring a manufacturing facility would involve significant expenditure of time and money for design and construction of the facility, purchasing equipment, hiring and training a production staff, purchasing raw material, and attaining an efficient level of production. Although we have not determined the cost of constructing production facilities that meet FDA requirements, we expect that the cost would be substantial, and that we would need to raise additional capital in the future for that purpose. To avoid the incurrence of those expenses and delays, we are relying on Hospira and CJ for the production of Hextend, but there can be no assurance that satisfactory arrangements will be made for any new products that we may develop.

Table of Contents

Facilities Required—Stem Cell Products

We lease an 11,000 square foot tissue culture facility in Alameda, California. The facility is GMP capable and has previously been certified as Class 1000 and Class 10,000 laboratory space, and includes cell culture and manufacturing equipment previously validated for use in GMP manufacture of cell-based products. Our subsidiary, Embryome Sciences, will use the facility for the production of hEPCs, progenitor cell lines, and products derived from those hEPC lines. OncoCyte will also conduct its research and development activities at this facility.

Raw Materials

Although most ingredients in the products we are developing are readily obtainable from multiple sources, we know of only a few manufacturers of the hydroxyethyl starches that serve as the primary drug substance in Hextend and PentaLyte. Hospira and CJ presently have a source of supply of the hydroxyethyl starch used in Hextend and PentaLyte and have agreed to maintain a supply sufficient to meet market demand for Hextend in the countries in which they market the product. We believe that we will be able to obtain a sufficient supply of starch for our needs in the foreseeable future, although we do not have supply agreements in place. If for any reason a sufficient supply of hydroxyethyl starch could not be obtained, we or a licensee would have to acquire a manufacturing facility and the technology to produce the hydroxyethyl starch according to good manufacturing practices. We would have to raise additional capital to participate in the development and acquisition of the necessary production technology and facilities, which may not be feasible. The use of a different hydroxyethyl starch could require us or a licensee to conduct additional clinical trials for FDA or foreign regulatory approval to market Hextend with the new starch.

If arrangements cannot be made for a source of supply of hydroxyethyl starch, we would have to reformulate our solutions to use one or more other starches that are more readily available. In order to reformulate our products, we would have to perform new laboratory and clinical testing to determine whether the alternative starches could be used in a safe and effective synthetic plasma volume expander, low temperature blood substitute, or organ preservation solution. We or our licensees would also have to obtain new regulatory approvals from the FDA and foreign regulatory agencies to market the reformulated product. If needed, such testing and regulatory approvals would require the incurrence of substantial cost and delay, and there is no certainty that any such testing would demonstrate that an alternative ingredient, even if chemically similar to the one currently used, would be safe or effective.

Table of Contents

Marketing

Stem Cell Research Products

Our products for use in stem cell research are being offered to researchers at universities and other institutions, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. By initially focusing our resources on products and technologies that will be used by researchers and drug developers at larger institutions and corporations, we believe that we will be able to commercialize products more quickly, and using less capital, than we would by developing therapeutic products ourselves.

On July 7, 2009, Embryome Sciences entered into an agreement under which Millipore Corporation is now a worldwide distributor of ACTCellerate™ human progenitor cell lines. Millipore's initial offering of Embryome Sciences' products began during January 2010, with six novel progenitor cell lines, which are being marketed and distributed on a worldwide basis. We anticipate that Embryome Sciences will jointly launch with Millipore, within the coming 12 months, an additional 29 cell lines, and associated ESpan™ growth media for the in vitro propagation of each progenitor cell line.

Millipore will be Embryome Sciences' exclusive third party distributor of the products covered by the agreement, although Embryome Sciences retains the right to sell the products to its own customers and is presently marketing the initial products online at Embryome.com. Embryome Sciences' products may also be offered in the People's Republic of China and other countries in Asia through BioTime Asia. Embryome Sciences will provide the products to Millipore on consignment and will be paid on a quarterly basis for products sold. Embryome Sciences will receive additional annual payments from Millipore based on a percentage of annual sales, if annual sales exceed certain milestone amounts.

The Millipore agreement will have a term of five years, subject to annual renewal if the parties so elect, and subject to Millipore's right to terminate the agreement at any time upon 60 days notice. Either party may also terminate the agreement in the case of an uncured breach or default by the other party.

The market for our stem cell products may be impacted by the amount of government funding available for research in the development of stem cell therapies.

Plasma Volume Expanders

Hextend is being distributed in the United States by Hospira and in South Korea by CJ under exclusive licenses from us. Hospira also has the right to obtain licenses to manufacture and sell other BioTime products. We have granted CJ the right to market PentaLyte in South Korea, and we have licensed to Summit the right to market Hextend and PentaLyte in Japan, China, and Taiwan, but our licensees will have to first obtain the foreign regulatory approvals required to sell our product in those countries.

Table of Contents

Because Hextend is a surgical product, sales efforts must be directed to physicians and hospitals. The Hextend marketing strategy is designed to reach its target customer base through sales calls, and through an advertising campaign focused on the use of a plasma-like substance to replace lost blood volume and on the ability of Hextend to support vital physiological processes.

Hextend competes with other products used to treat or prevent hypovolemia, including albumin, generic 6% hetastarch solutions, and crystalloid solutions. The competing products have been commonly used in surgery and trauma care for many years, and in order to sell Hextend, physicians must be convinced to change their product loyalties. Although albumin is expensive, crystalloid solutions and generic 6% hetastarch solutions sell at low prices. In order to compete with other products, particularly those that sell at lower prices, Hextend will have to be recognized as providing medically significant advantages.

The FDA has required the manufacturers of 6% hetastarch in saline solutions to change their product labeling by adding a warning stating that those products are not recommended for use as a cardiac bypass prime solution, or while the patient is on cardiopulmonary bypass, or in the immediate period after the pump has been disconnected. We have not been required to add that warning to the labeling of Hextend. An article discussing this issue entitled “6% Hetastarch in Saline Linked to Excessive Bleeding in Bypass Surgery” appeared in the December 2002 edition of Anesthesiology News. We understand that a number of hospitals have switched from 6% hetastarch in saline to Hextend due to these concerns.

As part of the marketing program, a number of studies have been conducted that show the advantages of receiving Hextend and other BioTime products during surgery. As these studies are completed, the results are presented at medical conferences and articles written for publication in medical journals. We are also aware of independent studies using Hextend that are being conducted by physicians and hospitals who may publish their findings in medical journals or report their findings at medical conferences. For example, a recent independent study in hemodynamically unstable trauma patients conducted at the University of Miami Ryder Trauma Center reported that initial resuscitation with Hextend was associated with no obvious coagulopathy and reduced mortality compared to fluid resuscitation without Hextend. The outcome of future medical studies and timing of the publication or presentation of the results could have an effect on Hextend sales.

Patents and Trade Secrets

We currently hold 26 issued United States patents having composition and methods of use claims covering our proprietary solutions, including Hextend and PentaLyte. The most recent U.S. patents were issued during March 2009. Some of our allowed claims in the United States, which include the composition and methods of use of Hextend and PentaLyte, are expected to remain in force until 2014 in the case of the composition patents, and 2019 in the case of the methods of use patents. Patents covering certain of our solutions have also been issued in several countries of the European Union, Australia, Israel, Russia, South Africa, South Korea, Japan, China, Hong Kong, Taiwan and Singapore, and we have filed patent applications in other foreign countries for certain products, including Hextend, HetaCool, and PentaLyte. Certain device patents describing our hyperbaric (high pressure oxygen) chamber, and proprietary microcannula (a surgical tool) have also been issued in the United States and overseas, both of which - although only used in research so far - have possible indications in clinical medicine. There is no assurance that any additional patents will be issued. Further, the enforcement of patent rights often requires litigation against third party infringers, and such litigation can be costly to pursue.

Table of Contents

In addition to patenting our own technology, we have licensed patents and patent applications for certain stem cell technology, hEPC lines, and hES cell lines from other companies. See “Our Business--Licensed Stem Cell Technologies and Stem Cell Product Development Agreements.”

In Europe, the European Patent Convention prohibits the granting of European patents for inventions that concern "uses of human embryos for industrial or commercial purposes." The European Patent Office is presently interpreting this prohibition broadly, and is applying it to reject patent claims that pertain to human embryonic stem cells. However, this broad interpretation is being challenged through the European Patent Office appeals system. As a result, we do not yet know whether or to what extent we will be able to obtain patent protection for our human embryonic stem cell technologies in Europe.

There is a risk that any patent applications that we file and any patents that we hold or later obtain could be challenged by third parties and declared invalid or infringing of third party claims. A patent interference proceeding may be instituted with the U.S. Patent and Trademark Office (the “PTO”) when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the PTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the PTO’s decision is subject to appeal. This means that if an interference proceeding arises with respect to any of our patent applications, we may experience significant expenses and delay in obtaining a patent, and if the outcome of the proceeding is unfavorable to us, the patent could be issued to a competitor rather than to us. In addition to interference proceedings, the PTO can reexamine issued patents at the request of a third party seeking to have the patent invalidated. This means that patents owned or licensed by us may be subject to reexamination and may be lost if the outcome of the reexamination is unfavorable to us.

Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. Like US PTO interference proceedings, these foreign proceedings can be very expensive to contest and can result in significant delays in obtaining a patent or can result in a denial of a patent application.

Table of Contents

The enforcement of patent rights often requires litigation against third party infringers, and such litigation can be costly to pursue. Even if we succeed in having new patents issued or in defending any challenge to issued patents, there is no assurance that our patents will be comprehensive enough to provide us with meaningful patent protection against our competitors.

In addition to patents, we rely on trade secrets, know-how, and continuing technological advancement to maintain our competitive position. We have entered into intellectual property, invention, and non-disclosure agreements with our employees, and it is our practice to enter into confidentiality agreements with our consultants. There can be no assurance, however, that these measures will prevent the unauthorized disclosure or use of our trade secrets and know-how, or that others may not independently develop similar trade secrets and know-how or obtain access to our trade secrets, know-how, or proprietary technology.

Competition

Plasma Volume Expanders

Our plasma volume expander solutions will compete with products currently used to treat or prevent hypovolemia, including albumin, other colloid solutions, and crystalloid solutions presently manufactured by established pharmaceutical companies, and with human blood products. Some of these products – crystalloid solutions in particular – are commonly used in surgery and trauma care, and sell at low prices. In order to compete with other products, particularly those that sell at lower prices, our products will have to be recognized as providing medically significant advantages. Like Hextend, the competing products are being manufactured and marketed by established pharmaceutical companies that have large research facilities, technical staffs, and financial and marketing resources. B.Braun presently markets Hespan, an artificial plasma volume expander containing 6% hetastarch in saline solution. Hospira and Baxter International manufacture and sell a generic equivalent of Hespan. As a result of the introduction of generic plasma expanders and new proprietary products, competition in the plasma expander market has intensified, and wholesale prices have declined. Hospira, which markets Hextend in the United States, is also the leading seller of generic 6% hetastarch in saline solution, and recently obtained the right to sell Voluven®, a plasma volume expander containing a 6% low molecular weight hydroxyethyl starch in saline solution. Sanofi-Aventis, Baxter International, and Alpha Therapeutics sell albumin, and Hospira, Baxter International, and B.Braun sell crystalloid solutions.

To compete with new and existing plasma expanders, we have developed products that contain constituents that may prevent or reduce the physiological imbalances, bleeding, fluid overload, edema, poor oxygenation, and organ failure that can occur when competing products are used. To compete with existing organ preservation solutions, we have developed solutions that can be used to preserve all organs simultaneously and for long periods of time.

Table of Contents

A number of other companies are known to be developing hemoglobin and synthetic red blood cell substitutes and technologies. Our products have been developed for use either before red blood cells are needed or in conjunction with the use of red blood cells. In contrast, hemoglobin and other red blood cell substitute products are designed to remedy hypoxia and similar conditions that may result from the loss of oxygen-carrying red blood cells. Those products would not necessarily compete with our products unless the oxygenating molecules were included in solutions that could replace fluid volume and prevent or reduce the physiological imbalances as effectively as our products. Generally, red blood cell substitutes are more expensive to produce and potentially more toxic than Hextend and PentaLyte.

The competition we face is likely to intensify further as new products and technologies reach the market. Superior new products are likely to sell for higher prices and generate higher profit margins once acceptance by the medical community is achieved. Those companies that are successful in introducing new products and technologies to the market first may gain significant economic advantages over their competitors in the establishment of a customer base and track record for the performance of their products and technologies. Such companies will also benefit from revenues from sales that could be used to strengthen their research and development, production, and marketing resources. All companies engaged in the medical products industry face the risk of obsolescence of their products and technologies as more advanced or cost effective products and technologies are developed by their competitors. As the industry matures, companies will compete based upon the performance and cost effectiveness of their products.

Products for Stem Cell Research

The stem cell industry is 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.

Table of Contents

We believe that some of our competitors are trying to develop hES cell, iPS cell, and hEPC based technologies and products that may 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 cloning or differentiation of stem 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.

Government Regulation

FDA and Foreign Regulation

The United States Food and Drug Administration ("FDA") and foreign regulatory authorities will regulate our proposed products as drugs, biologicals, or medical devices, depending upon such factors as the use to which the product will be put, the chemical composition, and the interaction of the product on the human body. In the United States, products that are intended to be introduced into the body, such as plasma volume expanders, will be regulated as drugs, while tissues and cells intended for transplant into the human body will be regulated as biologicals, and both plasma volume expanders and tissue and cell therapeutic products will be reviewed by the FDA staff responsible for evaluating biologicals.

Our domestic human drug and biological products will be subject to rigorous FDA review and approval procedures. After testing in animals, an Investigational New Drug Application ("IND") must be filed with the FDA to obtain authorization for human testing. Extensive clinical testing, which is generally done in three phases, must then be undertaken at a hospital or medical center to demonstrate optimal use, safety, and efficacy of each product in humans. Each clinical study is conducted under the auspices of an independent Institutional Review Board ("IRB"). The IRB will consider, among other things, ethical factors, the safety of human subjects, and the possible liability of the institution. The time and expense required to perform this clinical testing can far exceed the time and expense of the research and development initially required to create the product. No action can be taken to market any therapeutic product in the United States until an appropriate New Drug Application ("NDA") has been approved by the FDA. FDA regulations also restrict the export of therapeutic products for clinical use prior to NDA approval.

Even after initial FDA approval has been obtained, further studies may be required to provide additional data on safety or to gain approval for the use of a product as a treatment for clinical indications other than those initially targeted. In addition, use of these products during testing and after marketing could reveal side effects that could delay, impede, or prevent FDA marketing approval, resulting in FDA-ordered product recall, or in FDA-imposed limitations on permissible uses.

Table of Contents

The FDA regulates the manufacturing process of pharmaceutical products, and human tissue and cell products, requiring that they be produced in compliance with "good manufacturing practices." See "Manufacturing." The FDA also regulates the content of advertisements used to market pharmaceutical products. Generally, claims made in advertisements concerning the safety and efficacy of a product, or any advantages of a product over another product, must be supported by clinical data filed as part of an NDA or an amendment to an NDA, and statements regarding the use of a product must be consistent with the FDA approved labeling and dosage information for that product.

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Even if FDA approval has been obtained, approval of a product by comparable regulatory authorities of foreign countries must be obtained prior to the commencement of marketing the product in those countries. The time required to obtain such approval may be longer or shorter than that required for FDA approval.

The United States government and its agencies have until recently refused to fund research which involves the use of human embryonic tissue. President Bush issued Executive Orders on August 9, 2001 and June 20, 2007 that permitting federal funding of research on hES cells using only the limited number of hES cell lines that had already been created as of August 9, 2001. On March 9, 2009, President Obama issued an Executive Order rescinding President Bush's August 9, 2001 and June 20, 2007 Executive Orders. President Obama's Executive Order also instructed the National Institutes of Health to review existing guidance on human stem cell research and to issue new guidance on the use of hES cells in federally funded research, consistent with President's new Executive Order and existing law. The NIH has adopted new guidelines that went into effect July 7, 2009. The central focus of the new guidelines is to assure that hES cells used in federally funded research were derived from human embryos that were created for reproductive purposes, were no longer needed for this purpose, and were voluntarily donated for research purposes with the informed written consent of the donors. Those hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research.

In addition to President Obama's Executive Order, a bipartisan bill has been introduced in the United States Senate that would allow Federal funding of hES research. The Senate bill is identical to one that was previously approved by both Houses of Congress but vetoed by President Bush. The Senate Bill provides that hES cells will be eligible for use in research conducted or supported by federal funding if the cells meet each of the following guidelines: (1) the stem cells were derived from human embryos that have been donated from in vitro fertilization clinics, were created for the purposes of fertility treatment, and were in excess of the clinical need of the individuals seeking such treatment; (2) prior to the consideration of embryo donation and through consultation with the individuals seeking fertility treatment, it was determined that the embryos would never be implanted in a woman and would otherwise be discarded, and (3) the individuals seeking fertility treatment donated the embryos with written informed consent and without receiving any financial or other inducements to make the donation. The Senate Bill authorizes the NIH to adopt further guidelines consistent with the legislation.

Table of Contents

California State Regulations

The state of California has adopted legislation and regulations that require institutions that conduct stem cell research to notify, and in certain cases obtain approval from, a Stem Cell Research Oversight Committee ("SCRO Committee") before conducting the research. Advance notice, but not approval by the SCRO Committee, is required in the case of in vitro research that does not derive new stem cell lines. Research that derives new stem cell lines, or that involves fertilized human oocytes or blastocysts, or that involves clinical trials or the introduction of stem cells into humans, or that involves introducing stem cells into animals, requires advanced approval by the SCRO Committee. Clinical trials may also entail approvals from an institutional review board ("IRB") at the medical center at which the study is conducted, and animal studies may require approval by an Institutional Animal Care and Use Committee.

All human pluripotent stem cell lines that will be used in Embryome Sciences research must be acceptably derived. To be acceptably derived, the pluripotent stem cell line must have either:

Been listed on the National Institutes of Health Human Embryonic Stem Cell Registry, or

Been deposited in the United Kingdom Stem Cell Bank, or

Been derived by, or approved for use by, a licensee of the United Kingdom Human Fertilisation and Embryology Authority, or

Been derived in accordance with the Canadian Institutes of Health Research Guidelines for Human Stem Cell Research under an application approved by the National Stem Cell Oversight Committee, or

Been derived under the following conditions:

(a) Donors of gametes, embryos, somatic cells, or human tissue gave voluntary and informed consent.

(b) Donors of gametes, embryos, somatic cells, or human tissue did not receive valuable consideration. This provision does not prohibit reimbursement for permissible expenses as determined by an IRB.

Table of Contents

(c) A person may not knowingly, for valuable consideration, purchase or sell gametes, embryos, somatic cells, or human tissue for research purposes. This provision does not prohibit reimbursement for permissible expenditures as determined by an IRB or Committee. "Permissible expenditures" means necessary and reasonable costs directly incurred as a result of persons, not including human subjects or donors, providing gametes, embryos, somatic cells, or human tissue for research purposes. Permissible expenditures may include but are not limited to costs associated with processing, quality control, storage, or transportation of materials.

(d) Donation of gametes, embryos, somatic cells, or human tissue was overseen by an IRB (or, in the case of foreign sources, an IRB-equivalent).

(e) Individuals who consented to donate stored gametes, embryos, somatic cells, or human tissue were not reimbursed for the cost of storage prior to the decision to donate.

California regulations also require that certain records be maintained with respect to stem cell research and the materials used, including:

A registry of all human stem cell research conducted, and the source(s) of funding for this research.

A registry of human pluripotent stem cell lines derived or imported, to include, but not necessarily limited to:

(a) The methods utilized to characterize and screen the materials for safety;

(b) The conditions under which the materials have been maintained and stored;

(c) A record of every gamete donation, somatic cell donation, embryo donation, or product of somatic cell nuclear transfer that has been donated, created, or used.

(d) A record of each review and approval conducted by the SCRO Committee.

California Proposition 71

During November 2004, California State Proposition 71 ("Prop. 71"), the California Stem Cell Research and Cures Initiative, was adopted by state-wide referendum. Prop. 71 provides for a state-sponsored program designed to encourage stem cell research in the State of California, and to finance such research with State funds totaling approximately $295 million annually for 10 years beginning in 2005. This initiative created CIRM, which will provide grants, primarily but not exclusively, to academic institutions to advance both hES cell research and adult stem cell research. During April 2009, we were awarded a $4,721,706 research grant from CIRM. We believe that Prop. 71 funding for research in the use of hES cells for various diseases and conditions will contribute to the demand for stem cell research products.

Table of Contents

Employees

As of December 31, 2009, we employed seventeen persons on a full-time basis and three persons on a part-time basis. Six full-time employees hold Ph.D. Degrees in one or more fields of science.

Item 2. Properties

Our offices and laboratory facilities are located at 1301 Harbor Bay Parkway, in Alameda, California where we occupy approximately 11,000 square feet of office and research laboratory space. The facility is GMP capable and has previously been certified as Class 1000 and Class 10,000 laboratory space, and includes cell culture and manufacturing equipment previously validated for use in GMP manufacture of cell-based products. We will use the facility for the production of hEPCs and hEPC lines, and products derived from those hEPC lines.

Base monthly rent for this facility was $22,600 during 2009, and will be $23,340 during 2010. In addition to base rent, we pay a pro rata share of real property taxes and certain costs related to the operation and maintenance of the building in which the leased premises are located.

We also currently pay $5,050 per month for the use of approximately 900 square feet of office space in New York City, which is made available to us by one of our directors at his cost for use in conducting meetings. This cost will be reduced to $4,100 per month beginning March 1, 2010.

Item 3. Legal Proceedings

We are not presently involved in any material litigation or proceedings, and to our knowledge no such litigation or proceedings are contemplated.

Item 4. Submission of Matters to a Vote of Security Holders

Our annual meeting of shareholders was held on October 15, 2009. At the meeting our shareholders elected nine directors to serve until the next annual meeting and until their successors are duly elected and qualified. Our shareholders also approved an amendment to our articles of incorporation that increased the number of authorized common shares from 50,000,000 to 75,000,000, and two amendments of our 2002 Employee Stock Option Plan that made an additional 4,000,000 shares available for the grant of stock options or the sale of restricted stock to our key employees, directors, and consultants. The shareholders also ratified the Board of Directors' selection of Rothstein Kass & Company, P.C. as our independent public accountants to audit our financial statements for the current fiscal year. The following tables show the votes cast by our shareholders and any abstentions and broker non-votes with respect to the matters presented to shareholders for a vote at the meeting:

Table of Contents

Election of Directors

Nominee	Votes For	Percent of Vote	Votes Withheld
Neal C. Bradsher	27,492,709	99.31%	190,802
Arnold I. Burns	27,437,588	99.11%	245,923
Robert N. Butler	27,487,411	99.29%	196,100
Abraham E. Cohen	27,436,048	99.11%	247,463
Valeta A. Gregg	27,516,693	99.40%	166,818
Alfred D. Kingsley	27,514,388	99.39%	169,123
Pedro Lichtinger	27,476,494	99.25%	207,017
Judith Segall	27,517,747	99.40%	165,764
Michael D. West	27,514,809	99.39%	168,702

Amendment of Articles of Incorporation

	Shares Voted	Percent of Quorum
For	27,289,482	98.58%
Against	315,238	
Abstain	78,791	
Broker Non-Votes	-	

Amendments of 2002 Stock Option Plan

	Shares Voted	Percent of Quorum
For	18,306,538	66.13%
Against	621,140	
Abstain	41,252	
Broker Non-Votes	8,714,581	

Table of Contents

Ratification of Appointment of Independent Accountants

	Shares Voted	Percent of Quorum
For	27,555,842	99.54%
Against	68,694	
Abstain	58,975	
Broker Non-Votes	-	

Table of Contents

Part II

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

BioTime common shares were traded on the American Stock Exchange from August 31, 1999 until July 14, 2005, were quoted on the OTC Bulletin Board ("OTCBB") under the symbol BTIM from July 15, 2005 until October 29, 2009, and were relisted on the NYSE Amex on October 30, 2009, where they now continue to trade.

The following table sets forth the range of high and low closing prices for the common shares for the fiscal years ended December 31, 2008 and 2009 based on transaction data as reported by the OTCBB:

Quarter Ended	High	Low
March 31, 2008	0.40	0.27
June 30, 2008	0.60	0.29
September 30, 2008	1.80	0.55
December 31, 2008	2.30	0.95
March 31, 2009	2.55	1.25
June 30, 2009	3.00	1.57
September 30, 2009	6.40	2.30
December 31, 2009	6.35	3.59

Over-the-counter market quotations may reflect inter-dealer prices, without retail mark-up, mark-down, or commission, and may not necessarily represent actual transactions.

As of February 3, 2010, there were 9,690 holders of the common shares based on the share position listing.

BioTime has paid no dividends on its common shares since its inception and does not plan to pay dividends on its common shares in the foreseeable future.

The following table shows certain information concerning the options and warrants outstanding and available for issuance under all of our compensation plans and agreements as of December 31, 2009:

Table of Contents

Plan Category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights	Weighted Average Exercise Price of the Outstanding Options, Warrants, and Rights	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans
Equity Compensation Plans Approved by Shareholders	3,477,000	$ 1.12	2,087,168
Equity Compensation Plans Not Approved By Shareholders*	849,167	$ 1.82	-

*We have granted 321,667 warrants to certain consultants for providing services to us, and we have granted 402,500 warrants to an investment banker for arranging a portion of the loans under our Revolving Line of Credit Agreement. We have also granted 125,000 options to a consultant for providing services to us. These warrants and options were issued without registration under the Securities Act of 1933, as amended, in reliance upon the exemption provided by Section 4(2) thereunder.

Table of Contents

Item 6. Selected Financial Data

Not applicable.

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

Plasma Volume Expander Products

Our operating revenues have been derived almost exclusively from royalties and licensing fees related to our plasma volume expander products, primarily Hextend. Hextend has become the standard plasma volume expander at a number of prominent teaching hospitals and leading medical centers and is part of the Tactical Combat Casualty Care protocol. We believe that as the decision to use Hextend proliferates within leading U.S. hospitals, other smaller hospitals will follow this trend, contributing to sales growth.

Under our license agreements, Hospira and CJ will report sales of Hextend and pay us the royalties and license fees due on account of such sales after the end of each calendar quarter. We recognize such revenues in the quarter in which the sales report is received, rather than the quarter in which the sales took place.

Royalties on sales of Hextend that occurred during the fourth quarter of 2008 through the third quarter of 2009 are reflected in our financial statements for the year ended December 31, 2009. We received $996,681 in royalties from Hextend sales by Hospira during 2009. Royalties for 2009 decreased 12% from $1,132,460 in royalties from Hospira on Hextend sales in 2008. The decrease is primarily due to a decrease in sales to the U.S. Armed Forces. Purchases by the Armed Forces generally take the form of intermittent, large volume orders, and cannot be predicted with certainty. In addition, we received royalties from CJ in the amount of $83,197 for the period ended December 31, 2009, representing a 17% increase from $70,993 in royalties received for the period ended December 31, 2008. Royalties from sales of Hextend by CJ were included in license fees during accounting periods ended prior to January 1, 2009.

Based on sales of Hextend that occurred during the fourth quarter of 2009, we received royalties of $268,700 from Hospira during the first quarter of 2010, and we expect to receive royalties of $24,673 from CJ during the same quarter. Total royalties of $293,373 for the quarter increased 33% from royalties of $219,895 received during the same period last year. The increase is generally due to an increase in sales to the military by Hospira and to an increase in overall sales by CJ, offset somewhat by a decrease in sales to hospitals by Hospira. These royalties will be reflected in our financial statements for the first quarter of 2010.

During the year ended December 31, 2006, we received $500,000 from Summit for the right to co-develop Hextend and PentaLyte in Japan, China, and Taiwan. A portion of the cash payment is a partial reimbursement of BioTime's development costs of Hextend and a portion is a partial reimbursement of BioTime's development costs of PentaLyte. This payment is reflected on our balance sheet as deferred revenue. See Note 5 to financial statements for further discussion of the appropriate accounting.

Table of Contents

Stem Cells and Products for Regenerative Medicine Research

We are marketing our stem cell products for research through our wholly-owned subsidiary, Embryome Sciences. Embryome Sciences has entered into an agreement under which Millipore Corporation is a worldwide distributor of ACTCellerate™ human progenitor cell lines. Embryome Sciences began its initial delivery of six novel progenitor cell lines to Millipore during January 2010, which are being marketed and distributed on a worldwide basis. The companies anticipate jointly launching an additional 29 cell lines and associated optimized ESpan™ growth media for the in vitro propagation of each progenitor cell line within the coming 12 months. The Embryome Sciences products distributed by Millipore may also be purchased directly from Embryome Sciences at Embryome.com. We also plan to offer these research products in Asia through BioTime Asia.

Embryome Sciences has acquired an array of hES cell lines carrying inherited genetic diseases such as cystic fibrosis and muscular dystrophy. Study of these cell lines will enable researchers to better understand the mechanisms involved in causing the disease states, which may in turn expedite the search for potential treatments. We intend to offer these hES cell lines for sale online at Embryome.com during 2010.

Because we are in the process of launching our first products for stem cell research, and we cannot predict the amount of revenue that the new products we offer might generate. We did not receive significant revenues from stem cell product sales during 2009.

Embryome Sciences also plans to bring to market new growth and differentiation factors that will permit researchers to manufacture specific cell types from hES cells, and purification tools useful to researchers in quality control of products for regenerative medicine. Embryome Sciences also targeted for development ESpy™ cell lines, which will be derivatives of hES cells that will emit beacons of light. These light emitting cells will allow researchers to track the location and distribution of the cells in both in vitro and in vivo studies. As new products are developed, they will become available for purchase on Embryome.com.

Results of Operations

Under our license agreements with Hospira and CJ, our licensees report sales of Hextend and pay us the royalties and license fees due on account of such sales within 90 days after the end of each calendar quarter. We recognize such revenues in the quarter in which the sales report is received, rather than the quarter in which the sales took place, as we do not have sufficient sales history to accurately predict quarterly sales. For example, royalties on sales made during the fourth quarter of 2008 were not recognized until the first quarter of fiscal year 2009.

Table of Contents

Year Ended December 31, 2009 and Year Ended December 31, 2008

Our royalty revenues for the year ended December 31, 2009 consist of royalties on sales of Hextend made by Hospira and CJ during the period beginning October 1, 2008 and ending September 30, 2009. Royalty revenues recognized for that period were $1,079,951, compared with $1,203,453 recognized for the year ended December 31, 2008. This 10% decrease in royalties is attributable to a decrease in Hextend sales in the United States, which was slightly offset by an increase in sales in the Republic of Korea. The decrease in sales in the U.S. market is primarily due to a decrease in sales to the U.S. Armed Forces. Purchases by the Armed Forces generally take the form of intermittent, large volume orders, and cannot be predicted with certainty. Royalties from sales of Hextend by CJ were included in license fees during 2008.

We received the first two quarterly payments, totaling $790,192, from our research grant from CIRM in the second half of 2009. Because grant income is recognized as revenue when earned, and these amounts received covered the period of September 1, 2009 through February 28, 2010, only the amount earned through December 31, 2009, which equaled $546,794, was recognized in our consolidated financial statements.

We recognized as revenue $292,832 and $277,999 of license fees from CJ and Summit during 2009 and 2008, respectively. The license fees were received from CJ during April 2003 and July 2004, and from Summit during December 2004 and April and October of 2005, but full recognition of the license fees has been deferred, and is being recognized over the life of the contract, which has been estimated to last until approximately 2019 based on the current expected life of the governing patent covering our products in Korea and Japan. Royalties of $70,993 from Hextend sales by CJ were included in license fees during 2008. Beginning January 1, 2009, royalties from Hextend sales by CJ are included in royalties from product sales. See Notes 2 and 5 to the condensed interim financial statements.

Research and development expenses increased to $2,968,987 for the year ended December 31, 2009, from $1,725,187 for the year ended December 31, 2008. The increase is primarily attributable to our entry into the stem cell field, and includes increases of approximately $337,000 in salaries and other payroll related expenses charged to research and development, $62,000 in employee bonus amounts allocated to research and development, $120,000 in rent charged to research and development, $264,000 in laboratory expense and laboratory supplies, $189,000 in outside research expenses, $123,000 in expense associated with stock-based compensation allocated to research and development, $63,000 in scientific consulting fees, and $81,000 in fringe benefit costs allocated to research and development expense. Research and development expenses include laboratory study expenses, salaries, rent, insurance, and science-related consultants' fees.

Table of Contents

General and administrative expenses decreased to $2,476,447 for the year ended December 31, 2009 from $2,601,237 for the year ended December 31, 2008. This change reflects decreases of approximately $158,000 in general and administrative consulting expenses, $96,000 in stock based compensation expenses charged to general and administrative expense, and $954,000 in stock appreciation rights compensation expenses. These decreases were offset to some extent by increases of approximately $228,000 in stock-based compensation paid to our independent directors, $129,000 in cash compensation paid to our independent directors, $82,000 in stock-related expenses, $50,000 in annual report and meeting expenses, $81,000 in investor/public relations expenses, $30,000 in rent allocated to general and administration expenses, $64,000 in travel and entertainment expenses, $91,000 in legal expenses, $77,000 in outside services expenses, $41,000 in salaries and other payroll related expenses, $48,000 in employee bonus amounts allocated to general and administrative expense, $36,000 in accounting expenses, $35,000 in taxes allocated to general and administrative expense, and $48,000 in patent expenses. General and administrative expenses include salaries allocated to general and administrative accounts, consulting fees other than those paid for science-related consulting, expenditures for patent costs, trademark expenses, insurance costs allocated to general and administrative expenses, stock exchange-related costs, depreciation expense, shipping expenses, marketing costs, and other miscellaneous expenses. Stock-based compensation increased during 2009 in large part due to our common shares trading at prices higher than the prices that prevailed during 2008.

Interest and Other Income (Expense)

Our interest expense increased by approximately $688,000 during 2009 primarily due to interest incurred on our lines of credit (See Note 4) and approximately $304,000 relating to the conversion of the line of credit debt and accrued interest into common shares.

For the year ended December 31, 2009, other income increased to $30,112 from $7,518 for the year ended December 31, 2008. The difference is chiefly attributable to an increase of approximately $25,000 in interest income due to higher cash balances.

Taxes

At December 31, 2009 we had a cumulative net operating loss carryforward of approximately $53,000,000 for federal income tax purposes and $23,800,000 for state income tax purposes. Our effective tax rate differs from the statutory rate because we have recorded a 100% valuation allowance against our deferred tax assets, as we do not consider realization to be more likely than not.

Table of Contents

Liquidity and Capital Resources

At December 31, 2009, we had $12,189,081 of cash and cash equivalents on hand. We may need to obtain additional debt or equity capital in order to finance our operations. Since inception, we have primarily financed our operations through the sale of equity securities, licensing fees, royalties on product sales by our licensees, and borrowings. The amount of license fees and royalties that may be earned through the licensing and sale of our products and technology, the timing of the receipt of license fee payments, and the future availability and terms of equity financing, are uncertain. Although we have recently been awarded a research grant from CIRM for a particular project, we must finance our other research and operations with funding from other sources.

We presently have issued and outstanding 12,264,345 common share purchase warrants, most of which are exercisable at a price of $2.00 per share, and all of which expire in the fourth quarter of 2010. Of those warrants, 7,060,488 warrants have been registered under the Securities Act and are publicly traded on the NYSE Amex, and 5,124,649 warrants were issued without registration under the Securities Act of 1933, as amended, and are not yet listed for trading on the NYSE Amex. We plan to register for sale under the Securities Act and to list on the NYSE Amex the 5,124,649 additional outstanding warrants that were issued without registration under the Securities Act. We plan to use proceeds from the exercise of those warrants to fund our operations and a planned additional investment of $2,250,000 in OncoCyte. In order to provide warrant holders with an incentive to exercise their warrants prior to the October 31, 2010 warrant expiration date, we plan to offer the warrant holders the opportunity to exercise up to 3,000,000 warrants, in the aggregate, at a price of $1.70 per share, representing a discount of $0.30 per share from the regular warrant exercise price of $2.00 per share. The commencement and expiration dates of the warrant discount offer have not yet been determined. The warrant discount offer will not commence until a registration statement pertaining to the warrant discount offer becomes effective.

The unavailability or inadequacy of financing or revenues to meet future capital needs could force us to modify, curtail, delay, or suspend some or all aspects of our planned operations. Sales of additional equity securities could result in the dilution of the interests of present shareholders.

Cash generated by operations

During 2009 we received approximately $1,632,300 of cash in our operations. Our sources of that cash were approximately $996,700 of royalty revenues from Hospira and approximately $83,200 from CJ. We also received research grant installments totaling $790,192 from the California Institute of Regenerative Medicine, of which we recognized $526,795 in revenues as of December 31, 2009.

Table of Contents

Cash used in operations

During 2009 our total research and development expenditures were approximately $2,969,000 and our administrative expenditures were approximately $2,476,400. Net loss for the year ended December 31, 2009 amounted to $5,144,499. Net cash used in operating activities during this period amounted to $4,259,938. The difference between the net loss and net cash used in operating activities during the year ended December 31, 2009 was primarily attributable to increase of $1,637,400 in stock appreciation rights compensation liability, $782,543 in amortization of deferred finance costs on line of credit, an imputed cost of $304,399 arising from the right of Revolving Line of Credit Agreement lenders to exchange promissory notes for common shares, $263,397 in deferred grant income, $260,840 in stock-based compensation expense, $227,724 in stock options to outside directors, $190,845 in warrants issued in connection with the debt exchange offer, and $102,059 in amortization of deferred consulting fees; all of these were offset to some extent by a reversal of stock appreciation rights compensation liability in the amount of $2,121,088, a $419,456 decrease in accounts payable, $292,904 in amortization of deferred license revenues and $131,481 in prepaid expenses and other current assets. Net loss for the year ended December 31, 2008 amounted to $3,780,895. Net cash used in operating activities during this period amounted to $1,604,245. The difference between the net loss and net cash used in operating activities during the year ended December 31, 2008 was primarily attributable to increase of $470,537 in stock appreciation rights compensation liability, $330,394 arising from the right of Revolving Line of Credit Agreement lenders to exchange promissory notes for common shares, $321,514 in amortization of deferred finance costs on line of credit, $699,539 increase in accounts payable, $137,250 in common stock issued for services, increase of $114,938 in accrued interest expense on lines of credit, and $105,840 increase in deferred revenues; all of these were offset to some extent by $277,999 decrease in amortization of deferred license revenues.

Cash generated by financing activities

During the year ended December 31, 2009, $16,482,966 in net cash was provided from our financing activities. During May and July, 2009, we raised $8,000,000 of equity capital through the sale of 4,400,000 common shares and 4,400,000 stock purchase warrants to two private investors. The warrants entitle the investors to purchase additional common shares at an exercise price of $2.00 per share. The warrants will expire on October 31, 2010 and may not be exercised after that date. During October and December, 2009, our subsidiary, OncoCyte Corporation raised $4,000,000 through the sale of 6,000,000 shares of its common stock, no par value, to two investors who now hold 26% of the outstanding shares of OncoCyte.

We had a Revolving Line of Credit Agreement (the “Credit Agreement”) with certain private lenders that permitted us to borrow up to $3,500,000. The Credit Agreement was first implemented during 2006 and was amended from time to time since then, including amendments that extended the term of the Credit Agreement and increased the amount of credit available to us. The most recent loans made under the Credit Agreement bore interest at the rate of 12% per annum and matured on December 1, 2009. Loans under the Credit Agreement were collateralized by a security interest in our right to receive royalty and other payments under our license agreement with Hospira. During 2009, we borrowed $2,310,000 under the Credit Agreement, and we paid off $210,718 of principal and accrued interest on Credit Agreement loans that were made in prior years. The entire $3,499,259 principal balance of the Credit Agreement loans was retired through the exchange of BioTime common shares and warrants for Credit Agreement promissory notes during 2009. The Credit Agreement has now expired and no further loans may be made under it. See Note 4 of Notes to Financial Statements.

Table of Contents

During 2009, we received $848,449 in cash in connection with the exercises of 535,832 options. During the same period, we also received $1,616,342 in cash in connection with the exercises of 808,171 warrants.

In November 2008, Embryome Sciences borrowed $275,000 from certain private lenders. As consideration for arranging the loans, we issued warrants to purchase up to 277,919 common shares. The warrants will be exercisable at a price of $2.00 per share, and will expire on October 31, 2010 if not exercised prior to that date. The Embryome Sciences lenders subsequently joined as lenders under our Credit Agreement and accepted a promissory note from us in satisfaction of Embryome Sciences' loan obligation. The loan debt to these lenders was completely paid off as part of the August 2009 line of credit exchange offer.

We also obtained a line of credit from American Express in August 2004, which allows for borrowings up to $25,300. On June 11, 2009, we paid American Express $20,413, which paid off this line of credit in full. We no longer have any borrowings under this line of credit.

We also secured a line of credit from Advanta in November 2006, which allows for borrowings up to $35,000. As of December 31, 2008, we had drawn the entire line of credit. On June 9, 2009, we paid Advanta $32,495, which paid off this line of credit in full. We no longer have any borrowings under this line of credit.

Contractual obligations

We had no contractual obligations as of December 31, 2009, with the exception of a fixed, non-cancelable operating lease on our office and laboratory facility in Alameda, California. The lease expires on November 30, 2010. Base monthly rent was $22,600 during 2009, and will be $23,340 during 2010. In addition to base rent, we pay a pro rata share of real property taxes and certain costs related to the operation and maintenance of the building in which the leased premises are located.

Table of Contents

Future capital needs

We will depend upon royalties from the sale of Hextend by Hospira and CJ and upon our research grant from CIRM as our principal sources of revenues for the near future. Our royalty revenues from Hospira and CJ will be supplemented by any revenues that we may receive from our stem cell research products, and by license fees if we enter into new commercial license agreements for our products. Also, Millipore began marketing six hEPC lines for Embryome Sciences during January 2010, but it is too early to predict future revenues from the sale of our stem cell research products by Millipore.

The amount and pace of research and development work that we can do or sponsor, and our ability to commence and complete the clinical trials that are required in order for us to obtain FDA and foreign regulatory approval of products, depend upon the amount of money we have. We curtailed the pace and scope of our plasma volume expander development efforts due to the limited amount of funds available. Future research and clinical study costs are not presently determinable due to many factors, including the inherent uncertainty of these costs and the uncertainty as to timing, source, and amount of capital that will become available for these projects.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We did not hold any market risk sensitive instruments as of December 31, 2009 or December 31, 2008.

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
BioTime, Inc.

We have audited the accompanying consolidated balance sheets of BioTime, Inc. and Subsidiaries (collectively, the "Company") as of December 31, 2009 and 2008, and the related consolidated statements of operations, changes in equity (deficit), and cash flows of the years then ended. 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of BioTime, Inc. and Subsidiaries as of December 31, 2009 and 2008, and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Roseland, New Jersey
February 11, 2010

Table of Contents

Item 8. Financial Statements and Supplementary Data.

BIOTIME, INC.
CONSOLIDATED BALANCE SHEETS

	December 31, 2009	December 31, 2008
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 12,189,081	$ 12,279
Inventory	38,384	-
Prepaid expenses and other current assets	138,547	96,595
Total current assets	12,366,012	108,874
Equipment, net of accumulated depreciation of $54,291 and $602,510 in 2009 and 2008, respectively	131,133	105,607
Deferred license fees	880,000	750,000
Deposits	55,926	70,976
TOTAL ASSETS	$ 13,433,071	$ 1,035,457
LIABILITIES AND EQUITY/(DEFICIT)		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	$ 530,958	$ 1,179,914
Lines of credit payable, net	-	1,885,699-
Deferred grant income	263,397	-
Deferred license revenue, current portion	367,904	312,904
Total current liabilities	1,162,259	3,378,517
LONG-TERM LIABILITIES		
Stock appreciation rights compensation liability	-	483,688
Deferred rent, net of current portion	-	3,339
Deferred license revenue, net of current portion	1,223,823	1,516,727
Total long-term liabilities	1,223,823	2,003,754
COMMITMENTS AND CONTINGENCIES		
EQUITY/(DEFICIT):		
Preferred Shares, no par value, authorized 1,000,000 shares; none issued	-	-
Common Shares, no par value, authorized 75,000,000 shares; issued and outstanding shares; 33,667,659 and 25,076,798 in 2009 and 2008, respectively	59,722,318	43,184,606
Contributed capital	93,972	93,972
Accumulated deficit	(52,769,891)	(47,625,392)
Total shareholders' equity/(deficit)	7,046,399	(4,346,814)
Noncontrolling interest	4,000,590	-
Total equity/(deficit)	11,046,989	(4,346,814)
TOTAL LIABILITIES AND EQUITY/(DEFICIT)	$ 13,433,071	$ 1,035,457

See notes to consolidated financial statements.

Table of Contents

BIOTIME, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,	
	2009	2008
REVENUES:		
License fees	$292,832	$277,999
Royalty from product sales	1,079,951	1,203,453
Grant income and other revenues	552,385	22,340
Total revenues	1,925,168	1,503,792
EXPENSES:		
Research and development	(2,968,987)	(1,725,187)
General and administrative	(2,476,447)	(2,601,237)
Total expenses	(5,445,434)	(4,326,424)
Loss from operations	(3,520,266)	(2,822,632)
OTHER INCOME (EXPENSES):		
Interest expense	(1,653,755)	(965,781)
Other income	30,112	7,518
Total net other income (expenses)	(1,623,643)	(958,263)
NET LOSS	(5,143,909)	(3,780,895)
Net income attributable to the noncontrolling interest	(590)	-
Net loss attributable to BioTime, Inc.	$(5,144,499)	$(3,780,895)
BASIC AND DILUTED LOSS PER COMMON SHARE	$(0.18)	$(0.16)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:BASIC AND DILUTED	29,295,608	23,749,933

See notes to consolidated financial statements.

Table of Contents

BIOTIME, INC.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

	BioTime, Inc. Shareholders					
	Common Shares					
	Number of Shares	Amount	Contributed Capital	Accumulated Deficit	Noncontrolling Interest	Total Equity/(Deficit)
BALANCE AT JANUARY 1, 2008	23,034,374	$40,704,136	$93,972	$(43,844,497)	$ -	(3,046,389)
Common shares issued for new loans and extension of line of credit	580,410	273,200				273,200
Common shares issued for conversion of line of credit and accrued interest	1,112,014	1,442,409				1,442,409
Shares granted for services	225,000	137,250				137,250
Common shares issued for cash	100,000	100,000				100,000
Exercise of options	25,000	8,000				8,000
Stock options granted for compensation		134,518				134,518
Warrants issued for services		159,142				159,142
NET LOSS				(3,780,895)		(3,780,895)
BALANCE AT DECEMBER 31, 2008	25,076,798	$43,184,606	$93,972	$(47,625,392)	$ -	$ (4,346,814)
Sale of OncoCyte subsidiary shares to noncontrolling interest					4,000,000	4,000,000
Common shares issued for new loans and extension of line of credit	153,206	304,181				304,181
Common shares issued for conversion of line of credit and accrued interest	2,493,374	4,134,424				4,134,424
Shares granted for services	135,000	229,500				229,500
Shares granted for licensing fees	65,278	120,000				120,000
Common shares issued for cash	4,400,000	8,000,000				8,000,000
Exercise of options	535,832	848,449				848,449
Warrants exercised	808,171	1,616,342				1,616,342
Warrants issued for line of credit		398,548				398,548
Warrants issued for services		93,304				93,304
		488,564				488,564

Stock options granted for compensation						
Beneficial conversion feature		304,400				304,400
NET LOSS				(5,144,499)	590	(5,143,909)
BALANCE AT DECEMBER 31, 2009	33,667,659	$59,722,318	$93,972	$(52,769,891)	$ 4,000,590	$ 11,046,989

See notes to consolidated financial statements.

Table of Contents

BIOTIME, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,	
	2009	2008
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss attributable to BioTime, Inc.	$(5,144,499)	$(3,780,895)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization of capital leased assets	34,591	16,745
Loss on write-off of equipment	1,159	-
Bad debt expense	2,538	-
Reclassification of licensing fees expensed in prior year	(10,000)	-
Amortization of deferred license revenues	(292,904)	(277,999)
Amortization of deferred finance cost on lines of credit	782,542	321,514
Amortization of deferred consulting fees	102,059	19,409
Amortization of deferred grant revenues	(20,000)	-
Amortization of deferred rent	(3,339)	-
Beneficial conversion feature on notes and interest	304,400	330,394
Common shares issued for services	-	137,250
Stock appreciation rights compensation liability	(483,688)	470,537
Stock-based compensation	488,564	134,518
Warrants issued for outside services	93,304	52,393
Warrants issued for exchange offer interest expense	190,845	-
Net income allocable to noncontrolling interest	590	-
Changes in operating assets and liabilities:		
Accounts receivable, net	(349)	754
Inventory	(38,384)	-
Prepaid expenses and other current assets	(146,200)	57,115
Accounts payable and accrued liabilities	(419,456)	699,539
Interest on lines of credit	(40,108)	114,938
Deferred revenues	75,000	105,840
Deferred rent	-	(6,297)
Deferred grant income	263,397	-
Net cash used in operating activities	(4,259,938)	(1,604,245)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payments of license fees	-	(750,000)
Purchase of equipment	(61,276)	(109,872)
Security deposit	15,050	(50,000)
Net cash used in investing activities	(46,226)	(909,872)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Repayments of lines of credit	(263,825)	(16,085)
Borrowings under lines of credit	2,310,000	2,424,980
Deferred debt cost	(28,000)	-
Proceeds from exercises of stock options	848,449	-

Proceeds from exercises of warrants	1,616,342	-
Proceeds from issuance of common shares	8,000,000	108,000
Proceeds from sale of common shares of subsidiary	4,000,000	-
Net cash provided by financing activities	16,482,966	2,516,895
NET CHANGE IN CASH AND CASH EQUIVALENTS	12,176,802	2,778
CASH AND CASH EQUIVALENTS:		
At beginning of year	12,279	9,501
At end of year	$12,189,081	$12,279
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during year for interest	$415,330	$157,620
SUPPLEMENTAL SCHEDULE OF NONCASH FINANCING AND INVESTING ACTIVITIES :		
Common shares issued for conversion of line of credit and accrued interest	$4,134,424	$1,442,409
Common shares issued for new loans and extension of line of credit	$304,181	$273,200
Common shares issued for accounts payable	$229,500	-
Common shares issued for deferred license fees	$120,000	-
Warrants issued for line of credit	$398,548	$225,951
Value of rights to exchange promissory notes for stock	$304,400	-

See notes to consolidated financial statements.

Table of Contents

BIOTIME, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Basis of Presentation

General - BioTime is a biotechnology company engaged in two areas of biomedical research and product development. BioTime has historically developed blood plasma volume expanders, and related technology for use in surgery, emergency trauma treatment and other applications. Beginning in 2007, BioTime entered the regenerative medicine business, focused on human embryonic stem ("hES") cell and induced pluripotent stem ("iPS") cell technology. Products for the research market are being developed and marketed through BioTime's wholly owned subsidiary, Embryome Sciences, Inc. BioTime plans to develop stem cell products for therapeutic use to treat cancer through its new subsidiary OncoCyte Corporation, and to therapies to treat cancer and other diseases through BioTime Asia, Limited, a subsidiary formed as a Hong Kong corporation.

Regenerative medicine refers to therapies based on stem cell technology that are designed to rebuild cell and tissue function lost due to degenerative disease or injury. These novel stem cells provide a means of manufacturing every cell type in the human body and therefore show considerable promise for the development of a number of new therapeutic products. Embryome Sciences is focusing its current efforts in the regenerative medicine field on the development and sale of advanced human stem cell products and technology that can be used by researchers at universities and other institutions, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. These research-only markets generally can be marketed without regulatory (FDA) approval, and are therefore relatively near-term business opportunities when compared to therapeutic products. In July 2009, Embryome Sciences, Inc. entered into an agreement under which Millipore Corporation is a worldwide distributor of ACTCellerate™ human progenitor cell lines. Millipore's initial offering of Embryome Sciences' products will include six novel progenitor cell lines and optimized ESpan™ growth media for the in vitro propagation of each progenitor cell line, which are being marketed and distributed on a worldwide basis. The companies anticipate jointly launching 29 additional cell lines and associated ESpan™ growth media within the coming 12 months.

BioTime's operating revenues have been derived almost exclusively from royalties and licensing fees related to the sale of its plasma volume expander products, primarily Hextend®. BioTime began to make its first stem cell research products available during 2008 but has not yet generated significant revenues in that business segment. BioTime's ability to generate substantial operating revenue depends upon its success in developing and marketing or licensing its plasma volume expanders and stem cell products and technology for medical and research use. On April 29, 2009, the California Institute of Regenerative Medicine ("CIRM") awarded BioTime a $4,721,706 grant for a stem cell research project related to its ACTCellerate™ technology. The CIRM grant covers the period of September 1, 2009 through August 31, 2012, and to date BioTime has received the first two quarterly payments from CIRM in the amount of $395,096 each, on October 12, 2009 and on December 15, 2009, respectively.

Table of Contents

The consolidated balance sheets as of December 31, 2009 and 2008, the consolidated statements of operations for the years ended December 31, 2009 and 2008, the Consolidated Statements of Changes in Equity for the years ended December 31, 2009 and 2008, and the consolidated statements of cash flows for the years ended December 30, 2009 and 2008 have been prepared by BioTime's management in accordance with the instructions from the Form 10-K and Article 8-03 of Regulation S-X. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the financial position, results of operations, and cash flows at December 31, 2009 have been made.

Principles of Consolidation – The accompanying consolidated financial statements include the accounts of Embryome Sciences, Inc., a wholly-owned subsidiary of BioTime, and OncoCyte Corporation, a subsidiary of which BioTime owned approximately 74% of the outstanding shares of common stock as of December 31, 2009. All material intercompany accounts and transactions have been eliminated in consolidation. The consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States and with the accounting and reporting requirements of Regulation S-X of the SEC.

Certain Significant Risks and Uncertainties - BioTime's operations are subject to a number of factors that can affect its operating results and financial condition. Such factors include but are not limited to the following: the results of clinical trials of BioTime's pharmaceutical products; BioTime's ability to obtain United States Food and Drug Administration and foreign regulatory approval to market its pharmaceutical products; BioTime's ability to develop new stem cell research products and technologies; competition from products manufactured and sold or being developed by other companies; the price and demand for BioTime products; BioTime's ability to obtain additional financing and the terms of any such financing that may be obtained; BioTime's ability to negotiate favorable licensing or other manufacturing and marketing agreements for its products; the availability of ingredients used in BioTime's products; and the availability of reimbursement for the cost of BioTime's pharmaceutical products (and related treatment) from government health administration authorities, private health coverage insurers and other organizations.

2. Summary of Significant Accounting Policies

Use of Estimates - The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Table of Contents

Revenue recognition – BioTime complies with the Securities and Exchange Commission's ("SEC") Staff Accounting Bulletin guidance on revenue recognition. Royalty and license fee revenues consist of product royalty payments and fees under license agreements and are recognized when earned and reasonably estimable. BioTime recognizes revenue in the quarter in which the royalty report is received rather than the quarter in which the sales took place. When BioTime is entitled to receive up-front nonrefundable licensing or similar fees pursuant to agreements under which BioTime has no continuing performance obligations, the fees are recognized as revenues when collection is reasonably assured. When BioTime receives up-front nonrefundable licensing or similar fees pursuant to agreements under which BioTime does have continuing performance obligations, the fees are deferred and amortized ratably over the performance period. If the performance period cannot be reasonably estimated, BioTime amortizes nonrefundable fees over the life of the contract until such time that the performance period can be more reasonably estimated. Milestones payments, if any, related to scientific or technical achievements are recognized in income when the milestone is accomplished if (a) substantive effort was required to achieve the milestone, (b) the amount of the milestone payment appears reasonably commensurate with the effort expended, and (c) collection of the payment is reasonably assured.

Grant income is recognized as revenue when earned over the period of the grant. BioTime received two quarterly grant income payments for a total of $790,192 from CIRM during the second half of 2009, but as these amounts covered the period of September 1, 2009 through February 28, 2010, only the amount earned through December 31, 2009 was recognized in the consolidated financial statements.

Cash and cash equivalents – BioTime considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Concentrations of credit risk - Financial instruments that potentially subject BioTime to significant concentrations of credit risk consist primarily of cash and cash equivalents. BioTime limits the amount of credit exposure of cash balances by maintaining its accounts in high credit quality financial institutions. Cash equivalent deposits with financial institutions may, at times, exceed federally issued limits; however, BioTime has not experienced any losses on such accounts.

Equipment - Equipment is stated at cost. Equipment is being depreciated using the straight-line method over a period of thirty-six to eighty-four months.

Inventory – Inventories are stated at the lower of cost or market. Cost, which includes amounts related to materials, labor, and overhead, is determined in a manner which approximates the first-in, first-out ("FIFO") method.

Table of Contents

Deferred costs – Certain costs incurred in obtaining the line of credit were deferred and have been completely amortized as of December 31, 2009.

Patent costs - Costs associated with obtaining patents on products or technology developed are expensed as general and administrative expenses when incurred. These costs totaled $168,131 and $120,054, for the years ended December 31, 2009 and 2008, respectively. This accounting is in compliance with guidance promulgated by the Financial Accounting Standards Board (the "FASB") regarding goodwill and other intangible assets.

Research and development – BioTime complies with FASB requirements governing accounting for research and development costs. Research and development costs are expensed when incurred, and consist principally of salaries, payroll taxes, research and laboratory fees, and hospital and consultant fees related to clinical trials.

Income taxes - BioTime accounts for income taxes in accordance with FASB requirements, which prescribe the use of the asset and liability method whereby deferred tax asset or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect. Valuation allowances are established when necessary to reduce deferred tax assets when it is more likely than not that a portion or all of the deferred tax assets will not be realized. Effective January 1, 2007, BioTime adopted the provisions of a FASB Interpretation on accounting for uncertainty in income taxes. The FASB guidance also prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not sustainable upon examination by taxing authorities. BioTime recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. No amounts were accrued for the payment of interest and penalties for the years ended December 31, 2008 and 2009. Management is currently unaware of any issues under review that could result in significant payments or accruals.

Stock-based Compensation - BioTime adopted accounting standards governing share-based payment, which requires the measurement and recognition of compensation expense for all share-based payment awards made to directors and employees including employee stock options based on estimated fair values. In March 2005, the SEC issued additional guidelines which provide supplemental implementation guidance for valuation of share-based payments. BioTime has applied the provisions of this guidance in such valuations as well. Upon adoption of these guidelines, BioTime has continued to utilize the Black-Scholes Merton option pricing model which was previously used for BioTime's pro forma. BioTime's determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by BioTime's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, BioTime's expected stock price volatility over the term of the awards, and the actual and the projected employee stock options exercise behaviors. The expected term of options granted is derived from historical data on employee exercises and post-vesting employment termination behavior. The risk-free rate is based on the U.S Treasury rates in effect during the corresponding period of grant. Although the fair value of employee stock options is determined in accordance with recent FASB guidance, changes in the subjective assumptions can materially affect the estimated value. In management's opinion, the existing valuation models may not provide an accurate measure of the fair value of BioTime's employee stock options because the option-pricing model value may not be indicative of the fair value that would be established in a willing buyer/willing seller market transaction.

Table of Contents

Impairment of Long-Lived Assets –BioTime's long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. If an impairment indicator is present, BioTime evaluates recoverability by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If the assets are impaired, the impairment recognized is measured by the amount by which the carrying amount exceeds the estimated fair value of the assets.

Loss per share – Basic net loss per share is computed by dividing net loss available to common shareholders by the weighted-average common shares outstanding for the period. Diluted net loss per share reflects the weighted-average common shares outstanding plus the potential effect of dilutive securities or contracts which are convertible to common shares, such as options, warrants, convertible debt, and preferred stock (using the treasury stock method) and shares issuable in future periods, except in cases where the effect would be anti-dilutive. Diluted loss per share for the years ended December 31, 2009 and 2008 excludes any effect from 3,602,000 options and 12,264,345 warrants, and 3,538,332 options and 8,344,534 warrants, respectively, as the inclusion of those options and warrants would be antidilutive.

Fair value of financial instruments - The fair value of BioTime's assets and liabilities, which qualify as financial instruments under FASB guidance regarding disclosures about fair value of financial instruments, approximate the carrying amounts presented in the accompanying Consolidated Balance Sheets.

Reclassification – Certain prior year amounts have been reclassified to conform to the current year presentation.

Recently issued and recently adopted accounting pronouncements –In June 2009, the FASB approved the "FASB Accounting Standards Codification" ("Codification") as the single source of authoritative, nongovernmental, U.S. Generally Accepted Accounting Principles ("GAAP") to be launched on July 1, 2009. The Codification does not change current U.S. GAAP or how BioTime accounts for its transactions or the nature of related disclosures made; instead it is intended to simplify user access to all authoritative U.S. GAAP by providing all the authoritative literature related to a particular topic in one place. All existing accounting standard documents will be superseded, and all other accounting literature not included in the Codification will be considered non-authoritative. The Codification is effective for interim and annual periods ending after September 15, 2009. The Codification became effective for BioTime beginning with the quarter ending September 30, 2009 and did not have an impact on BioTime's balance sheet or results of operations for the year ended December 31, 2009.

Table of Contents

In December 2007, the FASB issued an accounting pronouncement dealing with non-controlling interests in consolidated financial statements. This pronouncement requires that ownership interests in subsidiaries held by parties other than the parent, and the amount of consolidated net income, be clearly identified, labeled, and presented in the consolidated financial statements. It also requires that once a subsidiary is deconsolidated, any retained non-controlling equity investment in the former subsidiary must be initially measured at fair value. Sufficient disclosures are required to clearly identify and distinguish between the interests of the parent and the interests of the non-controlling owners. The pronouncement is effective for fiscal years beginning after December 15, 2008, and requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements are applied prospectively. This accounting pronouncement did not have a material impact upon BioTime's financial statements for the year ended December 31, 2009.

In January 2009, the FASB issued an accounting staff position on the subject of impairment guidance which amended earlier guidance on the subject. The goal of this new staff position is to achieve a more consistent determination of whether an other-than-temporary impairment has occurred. This new guidance also retains and emphasizes the objective of an other-than-temporary impairment assessment provided in other related FASB guidance. This staff position became effective for interim and annual reporting periods ending after December 15, 2009, and will be applied prospectively. This staff position did not have a material impact upon BioTime's financial statements for the year ended December 31, 2009.

On April 1, 2009, the FASB issued an accounting staff position on the subject of business combinations to address application issues raised by preparers, auditors, and members of the legal profession on initial recognition and measurement, subsequent measurement and accounting, and disclosure of assets and liabilities arising from contingencies in a business combination. This staff position applies to assets or liabilities arising from contingencies in business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. This staff position did not have a material impact upon BioTime's financial statements for the years ended December 31, 2009 and 2008.

On April 9, 2009, the FASB issued an accounting staff position providing additional guidance for estimating fair value of an asset or liability when the volume and level of activity for the asset or liability have significantly decreased. This staff position also includes guidance on identifying circumstances that indicate a transaction is not orderly. This staff position applies to interim and annual reporting periods ending after June 15, 2009, and will be applied prospectively. This staff position did not have a material impact upon BioTime's financial statements for the years ended December 31, 2009.

Table of Contents

On April 9, 2009, the FASB issued an accounting staff position amending the other-than-temporary impairment guidance in U.S. GAAP for debt securities to make the guidance more operational and to improve the presentation and disclosure of other-than-temporary impairments on debt and equity securities in the financial statements. This staff position does not amend existing recognition and measurement guidance related to other-than-temporary equity securities. This staff position applies to interim and annual reporting periods ending after June 15, 2009. This staff position did not have a material impact upon BioTime's financial statements for the years ended December 31, 2009.

On April 9, 2009, the FASB issued an accounting staff position to require disclosures about fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. This staff position also amends earlier published FASB guidance to require those disclosures in summarized financial information at interim reporting periods. This staff position applies to interim reporting periods ending after June 15, 2009. This staff position did not have a material impact upon BioTime's financial statements for the years ended December 31, 2009.

In June 2009, the FASB issued an accounting pronouncement which modifies how a company determines when an entity that is insufficiently capitalized or is not controlled through voting (or similar rights) should be consolidated. This pronouncement clarifies that the determination of whether a company is required to consolidate an entity shall be based on, among other things, an entity's purpose and design and a company's ability to direct the activities of the entity that most significantly impact the entity's economic performance. This pronouncement requires an ongoing reassessment of whether a company is the primary beneficiary of a variable interest entity. This pronouncement also requires additional disclosures about a company's involvement in variable interest entities and any significant changes in risk exposure due to that involvement. This pronouncement applies to fiscal years beginning after November 15, 2009 and will become effective for BioTime on January 1, 2010. BioTime is currently evaluating the impact that the adoption of this pronouncement could have on its financial condition, results of operations, and disclosures.

3. Inventory

At December 31, 2009, BioTime's wholly owned subsidiary, Embryome Sciences, held $23,030 of inventory of all finished products on-site at its corporate headquarters in Alameda, California. At that same date, $15,353 of inventory of all finished products was held by a third party on consignment. At December 31, 2008, no inventory was held at either Embryome Sciences' corporate headquarters or by any third parties on consignment.

Table of Contents

4. Lines of Credit

BioTime had a Revolving Line of Credit Agreement (the "Credit Agreement") with certain private lenders that was collateralized by a security interest in BioTime's right to receive royalty and other payments under its license agreement with Hospira, Inc. BioTime was permitted to borrow up to $3,500,000 under the Credit Agreement. Following an amendment to the Credit Agreement in April 2009, the maturity date of this Revolving Line of Credit was extended to December 1, 2009 with respect to $2,669,282 in principal amount of loans. BioTime also received a total of $2,310,000 of new loans under the amended Credit Agreement during the period January 1 through May 19, 2009. Lenders who agreed to extend the maturity date of their outstanding loans to December 1, 2009 and lenders who made new loans received from BioTime a total of 112,310 common shares having an aggregate market value (based on closing price of the shares on the OTC Bulletin Board) equal to six percent (6%) of the lender's loan commitment, as consideration for the extension of the term of their loans or for making new loans. BioTime also repaid $210,718 of principal and accrued interest on loans that matured on April 15, 2009 and were not extended. In addition, from January 1 through April 15, 2009, certain lenders exercised their right to exchange loans totaling $624,415 of principal, plus accrued interest, for an aggregate of 423,936 BioTime common shares.

On August 20, 2009, BioTime completed an exchange offer with the holders of its revolving credit notes through which BioTime issued 1,989,515 common shares and warrants to purchase 100,482 common shares in exchange for notes in the aggregate principal amount of $3,349,259. BioTime also paid interest in the aggregate amount of $294,351 on the revolving credit notes tendered in the exchange offer. The warrants issued in the exchange offer are exercisable at a price of $2.00 per share, subject to adjustment under the terms of a Warrant Agreement governing the warrants, and will expire at on October 31, 2010.

A revolving credit note in the principal amount of $150,000 and associated accrued interest of $9,850 was converted into equity by the note holder upon maturity at December 1, 2009. Per the terms of the Credit Agreement, BioTime issued 79,925 common shares on that date to pay off both the principal loan amount and accrued interest. As of December 31, 2009, all loans, including both principal and accrued interest, made to BioTime under the Credit Agreement had been paid in full, the Credit Agreement has expired, and no further loans may be made under its terms.

5. Royalty Obligation and Deferred License Fees

In December 2004, BioTime entered into an agreement with Summit Pharmaceuticals International Corporation ("Summit") to co-develop Hextend and PentaLyte for the Japanese market. Under the agreement, BioTime received $300,000 in December 2004, $450,000 in April 2005, and $150,000 in October 2005. The payments represent a partial reimbursement of BioTime's development cost of Hextend and PentaLyte. In June 2005, following BioTime's approval of Summit's business plan for Hextend, BioTime paid to Summit a one-time fee of $130,000 for their services in preparing the plan. The agreement states that revenues from Hextend and PentaLyte in Japan will be shared between BioTime and Summit as follows: BioTime 40% and Summit 60%. Additionally, BioTime will pay Summit 8% of all net royalties received from the sale of PentaLyte in the United States.

Table of Contents

To comply with an accounting pronouncement, BioTime initially recorded $770,000 of the net proceeds from Summit as “long-term debt, or royalty obligation” even though BioTime is not legally indebted to Summit for that amount. In 2007, BioTime completed its Phase II trials of PentaLyte, but was unable to enter into a suitable licensing agreement for the product. BioTime has deemed the continuation of the clinical trials necessary to bring PentaLyte to market to be a significantly lower priority than it had been in the past. Therefore, it is less likely that proceeds from the 8% of PentaLyte US sales will be sufficient to pay down the Summit royalty obligation prior to the expiration of the patents applicable to the product. As a result of this change in accounting estimates, BioTime reevaluated treatment of this transaction and determined that the transaction no longer meets any of the factors of the applicable accounting pronouncement. Consequently, BioTime has reclassified the royalty obligation to deferred revenue and is amortizing it over the remaining life of the underlying patents.

On January 3, 2008, BioTime entered into a Commercial License and Option Agreement with Wisconsin Alumni Research Foundation (“WARF”). The WARF license permits BioTime to use certain patented and patent pending technology belonging to WARF, as well as certain stem cell materials, for research and development purposes, and for the production and marketing of products used as research tools, including in drug discovery and development. BioTime or Embryome Sciences will pay WARF royalties on the sale of products and services using the technology or stem cells licensed from WARF. The royalty will range from 2% to 4%, depending on the kind of products sold. The royalty rate is subject to certain reductions if BioTime also becomes obligated to pay royalties to a third party in order to sell a product. In March 2009, BioTime amended its license agreement with WARF. The amendment increased the license fee from the original $225,000 to $295,000, of which $225,000 is payable in cash and $70,000 was paid by delivering BioTime common shares having a market value of $70,000 as of March 2, 2009. This $70,000 payment was included in deferred license fees in BioTime’s consolidated balance sheet as of December 31, 2009. The amendment extends until March 2, 2010 the dates for payment of the $215,000 balance of the cash license fee and $20,000 in remaining reimbursement of costs associated with preparing, filing, and maintaining the licensed patents. The commencement date for payment of an annual $25,000 license maintenance fee has also been extended to March 2, 2010.

Table of Contents

On June 24, 2008, BioTime, along with its subsidiary, Embryome Sciences, entered into a Product Production and Distribution Agreement with Lifeline Cell Technology, LLC for the production and marketing of human embryonic progenitor cells ("hEPC") or hEPC lines, and products derived from those hEPCs. The products developed under the agreement with Lifeline will be produced and sold for research purposes, such as drug discovery and drug development uses. Embryome Sciences paid Lifeline $250,000, included in advanced license fee and others, to facilitate their product production and marketing efforts. Embryome Sciences will be entitled to recover that amount from the share of product sale proceeds that otherwise would have been allocated to Lifeline.

On July 10, 2008, Embryome Sciences entered into a License Agreement with Advanced Cell Technology, Inc. ("ACT") under which Embryome Sciences acquired exclusive world-wide rights to use ACT's "ACTCellerate" technology for methods to accelerate the isolation of novel cell strains from pluripotent stem cells. Embryome Sciences paid ACT a $250,000 license fee and will pay an 8% royalty on sales of products, services, and processes that utilize the licensed technology. Once a total of $1,000,000 of royalties has been paid, no further royalties will be due. The license will expire in twenty years or upon the expiration of the last to expire of the licensed patents, whichever is later. The $250,000 license fee was included in deferred license fees in BioTime's consolidated balance sheet as of December 31, 2009.

On August 15, 2008, Embryome Sciences entered into a License Agreement and a Sublicense Agreement with ACT under which Embryome Sciences acquired world-wide rights to use an array of ACT technology (the "ACT License") and technology licensed by ACT from affiliates of Kirin Pharma Company, Limited (the "Kirin Sublicense"). The ACT License and Kirin Sublicense permit the commercialization of products in human therapeutic and diagnostic product markets.

The technology licensed by Embryome Sciences covers methods to transform cells of the human body, such as skin cells, into an embryonic state in which the cells will be pluripotent. Under the ACT License, Embryome Sciences paid ACT a $200,000 license fee and will pay a 5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments (other than equity investments, research and development costs, loans and royalties) received by Embryome Sciences from sublicensing the ACT technology to third parties. Once a total of $600,000 of royalties has been paid, no further royalties will be due. The license will expire in twenty years or upon the expiration of the last to expire of the licensed patents, whichever is later. The $200,000 license fee payment was included in deferred license fees in BioTime's consolidated balance sheet as of December 31, 2009.

Under the Kirin Sublicense, Embryome Sciences has paid ACT a $50,000 license fee and will pay a 3.5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments (other than equity investments, research and development costs, loans and royalties) received by Embryome Sciences from sublicensing the Kirin Technology to third parties. Embryome Sciences will also pay to ACT or to an affiliate of Kirin Pharma Company, Limited ("Kirin"), annually, the amount, if any, by which royalties payable by ACT under its license agreement with Kirin are less than the $50,000 annual minimum royalty due. Those payments by Embryome Sciences will be credited against other royalties payable to ACT under the Kirin Sublicense. The license will expire upon the expiration of the last to expire of the licensed patents, or May 9, 2016 if no patents are issued. The $50,000 license fee payment has been included in deferred license fees in BioTime's consolidated balance sheet as of December 31, 2009.

Table of Contents

In February 2009, Embryome Sciences entered into a Stem Cell Agreement with Reproductive Genetics Institute ("RGI"). In partial consideration of the rights and licenses granted to Embryome Sciences by RGI, BioTime issued to RGI 32,259 common shares, having a market value of $50,000 on the effective date of the Stem Cell Agreement. This $50,000 payment was included in deferred license fees in BioTime's consolidated balance sheet as of December 31, 2009.

6. Related Party Transactions

During April 1998, BioTime initially entered into a financial advisory services agreement with Greenbelt, Corp., a corporation controlled by Alfred D. Kingsley and Gary K. Duberstein, who are also shareholders of BioTime. Until 2007, the agreement was renewed annually in March and covered the 12 months ending March 31. The renewed agreement for 2008 covered services provided from January 1 through December 31, 2008. Under the 2008 agreement, BioTime agreed to pay $135,000 in cash and to issue 300,000 common shares for the twelve months ending December 31, 2008. Greenbelt permitted BioTime to defer paying the entire $135,000 until January 2009. In return for Greenbelt allowing the deferral, 60,000 common shares became issuable by BioTime to Greenbelt in January 2009, the value of which was accrued for in BioTime's financial statements as of December 31, 2008. Greenbelt and BioTime agreed to terminate their agreement effective June 30, 2009, in connection with Alfred D. Kingsley joining the BioTime Board of Directors, and BioTime agreed to pay Greenbelt $90,000 for services rendered from January 1 through June 30, 2009. BioTime agreed to indemnify Greenbelt and its officers, affiliates, employees, agents, assignees, and controlling person from any liabilities arising out of or in connection with actions taken on BioTime's behalf under the agreement.

Activity related to the Greenbelt agreement is presented in the table below:

	Balance included in Accounts Payable at January 1,	Add: Cash-based expense accrued	Add: Stock-based expense accrued	Less: Cash payments	Less: Value of stock-based payments	Balance included in Accounts Payable at December 31,
2009	$ 454,500	$ 90,000	-	$ (225,000)	$ (229,500)	$ 90,000
2008	$ 90,000	$ 135,000	$ 366,750	-	$ (137,250)	$ 454,500

Table of Contents

BioTime also currently pays $5,050 per month for the use of approximately 900 square feet of office space in New York City, which is made available to BioTime on a month by month basis by one of its directors at his cost for use in conducting meetings. This cost will be reduced to $4,100 per month beginning March 1, 2010.

7. Total Equity (Deficit)

BioTime, as part of rights offerings and other agreements, has issued warrants to purchase its common shares. Activity related to warrants in 2009 and 2008 is presented in the table below:

	Number of Shares	Per share exercise price	Weighted Average Exercise Price
Outstanding, January 1, 2008	7,847,867	$ 2.00	$ 2.00
Granted in 2008	496,667	$ .68-2.00	1.73
Outstanding, December 31, 2008	8,344,534	$ 2.00	$ 1.98
Granted in 2009	4,727,982	$ 2.00	$ 2.00
Exercised in 2009	(808,171)	$ 2.00	$ 2.00
Outstanding, December 31, 2009	12,264,345	$ 2.00	$ 1.99

At December 31, 2009, 12,264,345 warrants to purchase common shares with a weighted average exercise price of $1.99 and a weighted average remaining contractual life of 0.86 years were outstanding.

In October 2009, the board of directors and shareholders approved an increase in the authorized number of common shares to 75,000,000 shares.

Preferred Shares

BioTime is authorized to issue 1,000,000 preferred shares of stock. The preferred shares may be issued in one or more series as the board of directors may by resolution determine. The board of directors is authorized to fix the number of shares of any series of preferred shares and to determine or alter the rights, references, privileges, and restrictions granted to or imposed on the preferred shares as a class, or upon any wholly unissued series of any preferred shares. The board of directors may, by resolution, increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series of preferred shares subsequent to the issue of shares of that series.

As of December 31, 2009 and 2008, BioTime has no issued and outstanding preferred shares.

Table of Contents

Common shares

BioTime is authorized to issue 75,000,000 common shares of stock with no par value. As of December 31, 2009 and 2008, BioTime has issued and outstanding 33,667,659 and 25,076,798 common shares of stock, respectively.

Significant common share transactions during the year ended December 31, 2008 are as follows:

BioTime issued 1,112,014 common shares of stock upon conversion of line of credit and accrued interest of $1,442,409.

BioTime issued 580,410 common shares of stock to the line of credit holders as inducement to extend loans to BioTime or to extend the maturity of the line of credit. These shares were valued at $273,200 based on the fair value of shares granted on the date of the transactions.

BioTime issued 100,000 common shares of stock for cash proceeds of $100,000. No funding cost was incurred.

Significant common share transactions during the year ended December 31, 2009 are as follows:

BioTime issued 2,493,374 common shares of stock upon conversion of its line of credit and associated accrued interest of $4,134,424.

BioTime issued 153,206 common shares of stock to the line of credit holders as inducement to extend loans to BioTime or to extend the maturity of the line of credit. These shares were valued at $304,181 based on the fair value of shares granted on the date of the transactions.

BioTime issued 4,400,000 common shares of stock and 4,400,000 warrants for BioTime’s common shares for cash proceeds of $8,000,000. No funding cost was incurred.

BioTime received total cash of $848,449 and $1,616,342 for the exercise of 535,832 options and 808,171 warrants, respectively. Average cash receipts were $1.583 for options and $2.00 for warrants.

OncoCyte Corporation (a newly formed subsidiary) sold approximately 26% of its common shares for $4,000,000 to a principal shareholder of BioTime. This amount is included as noncontrolling interest in the consolidated financial statements.

Table of Contents

8. Stock Option Plans

During 1992, BioTime adopted the 1992 Stock Option Plan (the "1992 Plan"). Options granted under the 1992 Plan expire five to ten years from the date of grant and may be fully exercisable immediately, or may be exercisable according to a schedule or conditions specified by the Board of Directors or the Option Committee. As of December 31, 2008, options to purchase 59,500 shares were outstanding at an exercise price of $11.75 under the 1992 Plan. At December 31, 2008, no options were available for future grants under the 1992 Plan.

During 2002, BioTime adopted the 2002 Plan, which was amended during December 2004 to reserve 2,000,000 common shares for issuance under options granted to eligible persons. During October 2007 and August 2009, the Board of Directors approved amendments to the 2002 Plan to make an additional 4,000,000 common shares available under the 2002 Plan. The 2007 and 2009 amendments were approved by BioTime's shareholders in October 2009. No options may be granted under the 2002 Plan more than ten years after the date upon which the 2002 Plan was adopted by the Board of Directors, and no options granted under the 2002 Plan may be exercised after the expiration of ten years from the date of grant. Under the 2002 Plan, options to purchase common shares may be granted to employees, directors and certain consultants at prices not less than the fair market value at date of grant for incentive stock options and not less than 85% of fair market value for other stock options. Options may be fully exercisable immediately, or may be exercisable according to a schedule or conditions specified by the Board of Directors or the Compensation Committee. The 2002 Plan also permits BioTime to sell common shares to employees subject to vesting provisions under restricted stock agreements that entitle BioTime to repurchase unvested shares at the employee's cost upon the occurrence of specified events, such as termination of employment. BioTime may permit employees or consultants, but not executive officers or directors, who purchase stock under restricted stock purchase agreements to pay for their shares by delivering a promissory note that is secured by a pledge of their shares. Under the 2002 Plan, as of December 31, 2009, BioTime had granted to certain employees, consultants, and directors, options to purchase a total of 3,602,000 common shares at exercise prices ranging from $0.32 to $4.97 per share.

In October 2007, BioTime granted certain executives options to purchase 2,000,000 common shares (the "Executive Options") under BioTime's 2002 Employee Stock Option Plan, as amended (the "2002 Plan"). The exercise price of the Executive Options is $0.50 per share. The Executive Options will vest at the rate of 1/60th of the number of Executive Options granted at the end of each full month of employment.

The vested portion of each executive's Executive Options shall expire on the earliest of (A) seven (7) years from the date of grant, (B) three months after the executive ceases to be an employee of BioTime for any reason other than his death or disability, or (C) one year after he ceases to be an employee of BioTime due to his death or disability; provided that if he dies during the three month period described in clause (B), the expiration date of the vested portion of this Option shall be one year after the date of his death.

Table of Contents

The Executive Options were originally paired with stock appreciation rights ("SARs") with respect to 1,302,030 shares. The SARs expired during October 2009, under their terms, when BioTime's shareholders approved an amendment to the 2002 Plan increasing the number of common shares available under the 2002 Plan from 2,000,000 to 4,000,000 shares.

On January 1, 2006, BioTime adopted a new accounting pronouncement, which requires the measurement and recognition for all share-based payment awards made to BioTime's employees and directors including employee stock options. The following table summarizes stock-based compensation expense related to employee and director stock options awards for the years ended December 31, 2009 and 2008, which was allocated as follows:

	Year Ended December 31,	
	2009	2008
All stock-based compensation expense:		
Research and Development	$ 150,899	$ -
General and Administrative	337,665	206,321
Stock appreciation rights/(reversal)	(483,688)	470,537
All stock-based compensation expense included in expenses	$ 4,876	$ 676,858

BioTime adopted a new accounting pronouncement using the modified prospective transition method of accounting for options granted on or after January 1, 2006. As of December 31, 2009, total unrecognized compensation costs related to unvested stock options was $2,360,829, which is expected to be recognized as expense over a weighted average period of approximately 5.09 years.

For all applicable periods, the value of each employee or director stock option was estimated on the date of grant using the Black-Scholes Merton model for the purpose of the pro forma financial disclosures in accordance with a new accounting pronouncement.

The weighted-average estimated fair value of stock options granted during the years ended December 31, 2009 and 2008 was $3.28 and $0.71 per share, respectively, using the Black-Scholes Merton model with the following weighted-average assumptions:

Table of Contents

	Year Ended December 31, 2009	Year Ended December 31, 2008
Expected life (in years)	6.24	5
Risk free interest rates	5.71%	3.22%
Volatility	115.49%	104%
Dividend yield	0%	0%

For options granted prior to 2006 and valued in accordance with GAAP, the expected life and the expected volatility of the stock options were based upon historical data. Forfeitures of employee stock options were accounted for on an as-incurred basis.

General Option Information

A summary of all option activity under the 1992 Plan and 2002 Plan for the years ended December 31, 2009 and 2008 is as follows:

	Options Available for Grant	Number of Options Outstanding	Weighted Average Exercise Price
January 1, 2008	726,168	3,333,332	$ 1.72
Granted1	(60,000)	60,000	0.55
Exercised	-	(25,000)	0.32
Forfeited/expired	80,000	(80,000)	1.55
December 31, 2008	746,168	3,288,332	$ 0.97
Added via Amendment to 2002 Plan2	2,000,000	-	-
Granted	(699,000)	699,000	3.28
Exercised1	-	(410,832)	1.73
Forfeited/Expired	40,000	(99,500)	7.90
December 31, 2009	2,087,168	3,477,000	$ 1.13

1This table excludes 250,000 options which were granted in 2008 outside the 1992 Plan and 2002 Plan, of which 125,000 were exercised in 2009.

2During October 2009, the 2002 Plan was amended to make 2,000,000 additional common shares available for the grant of options.

Table of Contents

Additional information regarding options outstanding as of December 31, 2009 is as follows:

Range of Exercise Prices	Options Outstanding Number Outstanding	Options Outstanding Weighted Avg. Remaining Contractual Life (yrs)	Options Outstanding Weighted Avg. Exercise Price	Options Exercisable Number Exercisable	Options Exercisable Weighted Avg. Exercise Price
$.32-$.47	467,000	2.84	$ 0.33	467,000	$ 0.33
.50	2,000,000	4.78	.50	866,667	0.50
.68-1.26	65,000	2.81	0.88	65,000	0.88
2.00-4.97	945,000	4.45	2.95	399,292	2.34
$0.32-$4.97	3,477,000	4.39	$ 1.13	1,797,958	$ 0.88

9. Commitments and Contingencies

During April 2008, BioTime relocated its principal office and laboratory to a facility located at Harbor Bay Parkway in Alameda, California, under a three year sublease, which has since been converted to a direct lease between BioTime and the building owner. The lease includes approximately 11,000 square feet of office and laboratory space and will expire on November 30, 2010. Base monthly rent was $22,600 during 2009, increasing to $23,340 during 2010. In addition to base rent, BioTime pays a pro rata share of real property taxes and certain costs related to the operation and maintenance of the building in which the leased premises are located.

BioTime executed an early termination of its lease of office and laboratory space at Heritage Square in Emeryville, California. The lease would have expired on May 31, 2010, but BioTime was able to negotiate an early release by paying base rent and other lease expenses through October 2009, plus two additional months of base rent.

Rent expenses totaled $682,982 and $527,682 for the years ended December 31, 2009 and 2008, respectively. Remaining minimum annual lease payments under the Alameda lease for the year ending after December 31, 2009 is as follows:

Year Ending December 31,	Minimum lease payments
2010	$256,729

Indemnification – Under BioTime's bylaws, BioTime has agreed to indemnify its officers and directors for certain events or occurrences arising as a result of the officer or director serving in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum potential amount of future payments that BioTime could be required to make under the indemnification provisions contained in BioTime's bylaws is unlimited. However, BioTime has a directors and officers liability insurance policy that limits its exposure and enables it to recover a portion of any future amounts paid. As a result of the insurance policy coverage, BioTime believes the estimated fair value of these indemnification agreements is minimal and no liabilities were recorded for these agreements as of December 31, 2009.

Table of Contents

Under the license agreements with Hospira and CJ, BioTime will indemnify Abbott Laboratories (Hospira's predecessor), Hospira, and/or CJ for any cost or expense resulting from any third party claim or lawsuit arising from alleged patent infringement, as defined, by Abbott, Hospira, or CJ relating to actions covered by the applicable license agreement. Management believes that the possibility of payments under the indemnification clauses is remote. Therefore, BioTime has not recorded a provision for potential claims as of December 31, 2009. BioTime enters into indemnification provisions under (i) agreements with other companies in the ordinary course of business, typically with business partners, licensees, licensors, contractors, hospitals at which clinical studies are conducted, and landlords, and (ii) agreements with investors, underwriters, investment bankers, and financial advisers. Under these provisions, BioTime generally agrees to indemnify and hold harmless the indemnified party for losses suffered or incurred by the indemnified party as a result of BioTime's activities or, in some cases, as a result of the indemnified party's activities under the agreement. These indemnification provisions often include indemnifications relating to representations made by BioTime with regard to intellectual property rights. These indemnification provisions generally survive termination of the underlying agreement. In some cases, BioTime has obtained liability insurance providing coverage that limits its exposure for indemnified matters. The maximum potential amount of future payments that BioTime could be required to make under these indemnification provisions is unlimited. BioTime has not incurred material costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, BioTime believes the estimated fair value of these agreements is minimal. Accordingly, BioTime has no liabilities recorded for these agreements as of December 31, 2009.

10. Income Taxes

The primary components of the net deferred tax assets at December 31, 2009 and 2008 were as follows:

	2009	2008
Deferred tax assets:		
Net operating loss carryforwards	$ 19,418,000	$ 16,760,000
Research & development and other credits	1,951,000	1,935,000
Other, net	363,000	1,276,000
Total	21,732,000	19,971,000
Valuation allowance	(21,732,000)	(19,971,000)
Net deferred tax assets	$ -0-	$ -0-

Table of Contents

Income taxes differed from the amounts computed by applying the U.S. federal income tax of 34% to pretax losses from operations as a result of the following:

Year Ended December 31,	2009	2008
Computed tax benefit at federal statutory rate	(34%)	(34%)
Permanent differences	0%	8%
Losses for which no benefit has been recognized	41%	34%
State tax benefit, net of effect on federal income taxes	(6%)	(6%)
Research and development and other credits	(1%)	(2%)
	0%	0%

As of December 31, 2009, BioTime has net operating loss carryforwards of approximately $53,000,000 for federal and $23,800,000 for state tax purposes, which expire through 2028. In addition, BioTime has tax credit carryforwards for federal and state tax purposes of $1,028,000 and $923,000, respectively, which expire through 2029.

No tax benefit has been recorded through December 31, 2009 because of the net operating losses incurred and a full valuation allowance has been provided. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. BioTime established a 100% valuation allowance for all periods presented due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

Internal Revenue Code Section 382 places a limitation (the “Section 382 Limitation”) on the amount of taxable income that can be offset by net operating loss (“NOL”) carryforwards after a change in control (generally greater than 50% change in ownership within a three-year period) of a loss corporation. California has similar rules. Generally, after a control change, a loss corporation cannot deduct NOL carryforwards in excess of the Section 382 Limitation. Due to these “change in ownership” provisions, utilization of the NOL and tax credit carryforwards may be subject to an annual limitation regarding their utilization against taxable income in future periods.

Table of Contents

11. Enterprise-wide Disclosures

Geographic Area Information

Revenues, including license fees, royalties, grant income, and other revenues by geographic area are based on the country of domicile of the licensee or grantor.

Geographic Area	Revenues for the Year ending December 31, 2009	2008
Domestic	$ 1,548,995	$ 1,225,793
Asia	376,173	277,999
Total revenues	$ 1,925,168	$ 1,503,792

All of BioTime's assets are located at its Alameda, California facility.

Major Sources of Revenues

BioTime has three major customers and one major grant comprising significant amounts of total revenues.

All of BioTime's royalty revenues were generated through sales of Hextend by Hospira in the United States and by CJ in the Republic of Korea. BioTime also earned license fees from CJ and Summit.

BioTime was also awarded a $4,721,706 grant for a stem cell research project related to its ACTCellerate™ technology by CIRM in April 2009. The CIRM grant covers the period of September 1, 2009 through August 31, 2012, and as of December 31, 2009, BioTime had received the first two quarterly payments from CIRM in the amount of $395,096 each.

The following table shows the relative portions of BioTime's Hextend and PentaLyte royalty and license fee revenues paid by Hospira, CJ, and Summit that were recognized during the years ended December 31, 2009 and 2008, and the CIRM grant payments recognized during the same periods:

Table of Contents

Sources of Revenues	% of Total Revenues for Year ended December 31,	
	2009	2008
Hospira	51.9%	81.2%
CJ Corp.	12%	8.9%
Summit	7.6%	9.9%
CIRM	28.5%	-

12. Subsequent Events

In February 2010, BioTime received royalties in the amount of $268,700 from Hospira based on sales of Hextend made by Hospira in the fourth quarter of 2009. This revenue will be reflected in BioTime's consolidated financial statements for the first quarter of 2010.

BioTime expects to receive royalties in the amount of $24,673 from CJ in February 2010 based on sales of Hextend made by CJ in the fourth quarter of 2009. This revenue will be reflected in BioTime's consolidated financial statements for the first quarter of 2010.

Subsequent Events – These consolidated financial statements were approved by management and the Board of Directors, and were issued on February 11, 2010. Subsequent events have been evaluated through this date.

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

Not applicable.

Item 9A(T). Controls and Procedures

Evaluation of Disclosure Controls and Procedures

It is management's responsibility to establish and maintain adequate internal control over all financial reporting pursuant to Rule 13a-15 under the Securities Exchange Act of 1934 (the "Exchange Act"). Our management, including our principal executive officer, our principal operations officer, and our principal financial officer, have reviewed and evaluated the effectiveness of our disclosure controls and procedures as of a date within ninety (90) days of the filing date of this Form 10-K annual report. Following this review and evaluation, management collectively determined that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to management, including our chief executive officer, our chief operations officer, and our chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Table of Contents

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the period covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f), is a process designed by, or under the supervision of, our principal executive officer, our principal operations officer, and our principal 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 dispositions of our assets;

Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. The scope of management's assessment of the effectiveness of internal control over financial reporting includes our consolidated subsidiary.

Table of Contents

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2009. Based on this assessment, management believes that, as of that date, our internal control over financial reporting was effective.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

Table of Contents

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

The name, age, and background of each of our directors are contained under the caption “Election of Directors” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and are incorporated herein by reference. Information about our executive officers, Committees of the Board, and compensation of directors is reported under the caption “Corporate Governance” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and is incorporated herein by reference.

We have a written Code of Ethics that applies to our principal executive officer, our principal financial officer and accounting officer, our other executive officers, and our directors. The purpose of the Code of Ethics is to promote (i) honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; (ii) full, fair, accurate, timely, and understandable disclosure in reports and documents that we file with or submit to the Securities and Exchange Commission and in our other public communications; (iii) compliance with applicable governmental rules and regulations, (iv) prompt internal reporting of violations of the Code to an appropriate person or persons identified in the Code; and (v) accountability for adherence to the Code. A copy of our Code of Ethics has been posted on our internet website and can be found at www.biotimeinc.com.

Information about our compliance with Section 16(a) of the Securities Exchange Act of 1934 is reported under the caption “Compliance with Section 16(a) of the Securities Exchange Act of 1934” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and is incorporated herein by reference.

Item 11. Executive Compensation

Information on compensation of our executive officers is reported under the caption “Executive Compensation” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and is incorporated herein by reference.

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

Information on the number of common shares of BioTime stock beneficially owned by each shareholder known by us to be the beneficial owner of 5% or more of our common shares, and by each director and named executive officer, and by all directors and named executive officers as a group is contained under the caption “Principal Shareholders” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and is incorporated herein by reference.

Table of Contents

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

Information about transactions with related persons; review, and approval or ratification of transactions with related persons; and director independence is reported under the caption “Election of Directors” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

Information about our Audit Committee’s pre-approval policy for audit services, and information on our principal accounting fees and services is reported under the caption “Ratification of the Selection of Our Independent Auditors” in our Proxy Statement for our 2010 Annual Meeting of Shareholders, and is incorporated herein by reference.

Table of Contents

Part IV

Item 15. Exhibits, Financial Statement Schedules

(a-1) Financial Statements.

The following financial statements of BioTime, Inc. are filed in the Form 10-K:

Consolidated balance sheets
Consolidated statements of operations
Consolidated statements of shareholders' deficit
Consolidated statements of cash flows

Notes to Financial Statements

(a-2) Financial Statement Schedules

All schedules are omitted because the required information is inapplicable or the information is presented in the financial statements or the notes thereto.

(a-3) Exhibits.

Exhibit Numbers	Description
3.1	Articles of Incorporation with all amendments.24
3.2	By-Laws, As Amended.2
4.1	Specimen of Common Share Certificate.1
4.2	Form of Warrant Agreement between BioTime, Inc. and American Stock Transfer & Trust Company3
4.3	Form of Amendment to Warrant Agreement between BioTime, Inc. and American Stock Transfer & Trust Company. 4
4.4	Form of Warrant4
4.5	Warrant Agreement between BioTime, Inc., Broadwood Partners, L.P., and George Karfunkel 22
4.6	Form of Warrant 22
10.1	Intellectual Property Agreement between BioTime, Inc. and Hal Sternberg.1
10.2	Intellectual Property Agreement between BioTime, Inc. and Harold Waitz.1
10.3	Intellectual Property Agreement between BioTime, Inc. and Judith Segall.1
10.4	Intellectual Property Agreement between BioTime, Inc. and Steven Seinberg.7

77

Table of Contents

10.5	Agreement between CMSI and BioTime Officers Releasing Employment Agreements, Selling Shares, and Transferring Non-Exclusive License.1
10.6	Agreement for Trans Time, Inc. to Exchange CMSI Common Stock for BioTime, Inc. Common Shares.1
10.7	2002 Stock Option Plan, as amended. 24
10.8	Exclusive License Agreement between Abbott Laboratories and BioTime, Inc. (Portions of this exhibit have been omitted pursuant to a request for confidential treatment).5
10.9	Modification of Exclusive License Agreement between Abbott Laboratories and BioTime, Inc. (Portions of this exhibit have been omitted pursuant to a request for confidential treatment).6
10.10	Exclusive License Agreement between BioTime, Inc. and CJ Corp.8
10.11	Hextend and PentaLyte Collaboration Agreement between BioTime, Inc. and Summit Pharmaceuticals International Corporation.9
10.12	Lease dated as of May 4, 2005 between BioTime, Inc. and Hollis R& D Associates 10
10.13	Addendum to Hextend and PentaLyte Collaboration Agreement Between BioTime Inc. and Summit Pharmaceuticals International Corporation11
10.14	Amendment to Exclusive License Agreement Between BioTime, Inc. and Hospira, Inc.12
10.15	Hextend and PentaLyte China License Agreement Between BioTime, Inc. and Summit Pharmaceuticals International Corporation.13
10.16	Employment Agreement, dated October 10, 2007, between BioTime, Inc. and Michael D. West.17
10.17	Commercial License and Option Agreement between BioTime and Wisconsin Alumni Research Foundation.14
10.18	Form of Amended and Restated Revolving Credit Note.15
10.19	Third Amended and Restated Revolving Line of Credit Agreement, March 31, 2008.16
10.20	Third Amended and Restated Security Agreement, dated March 31, 2008.16
10.21	Sublease Agreement between BioTime, Inc. and Avigen, Inc.17
10.22	License, Product Production, and Distribution Agreement, dated June 19, 2008, among Lifeline Cell Technology, LLC, BioTime, Inc., and Embryome Sciences, Inc. 18
10.23	License Agreement, dated July 10, 2008, between Embryome Sciences, Inc. and Advanced Cell Technology, Inc. 18
10.24	

License Agreement, dated August 15, between Embryome Sciences, Inc. and Advanced Cell Technology, Inc. 19

10.25 Sublicense Agreement, dated August 15, between Embryome Sciences, Inc. and Advanced Cell Technology, Inc. 19

Table of Contents

10.26	Fourth Amendment of Revolving Line of Credit Agreement.19
10.27	Fourth Amendment of Security Agreement.19
10.28	Stem Cell Agreement, dated February 23, 2009, between Embryome Sciences, Inc. and Reproductive Genetics Institute. 20
10.29	First Amendment of Commercial License and Option Agreement, dated March 11, 2009, between BioTime and Wisconsin Alumni Research Foundation. 20
10.30	Employment Agreement, dated October 10, 2007, between BioTime, Inc. and Robert Peabody. 20
10.31	Fifth Amendment of Revolving Line of Credit Agreement, dated April 15, 2009.21
10.32	Form of Amendment of Revolving Credit Note. 21
10.33	Fifth Amendment of Security Agreement, dated April 15, 2009. 21
10.34	Stock and Warrant Purchase Agreement between BioTime, Inc. and George Karfunkel. 22
10.35	Stock and Warrant Purchase Agreement between BioTime, Inc. and Broadwood Partners, L.P. 22
10.36	Registration Rights Agreement between BioTime, Inc., Broadwood Partners, L.P. and George Karfunkel. 22
10.37	Co-Exclusive OEM Supply Agreement, date July 7, 2009, between Embryome Sciences, Inc. and Millipore Corporation (Portions of this exhibit have been omitted pursuant to a request for confidential treatment). 23
10.38	Stock Purchase Agreement between OncoCyte Corporation and George Karfunkel.24
10.39	Registration Rights Agreement between OncoCyte Corporation and George Karfunkel.24
23.1	Consent of Rothstein, Kass & Company, P.C. 25
31	Rule 13a-14(a)/15d-14(a) Certification. 25
32	Section 1350 Certification. 25
1	Incorporated by reference to Registration Statement on Form S-1, File Number 33-44549 filed with the Securities and Exchange Commission on December 18, 1991, and Amendment No. 1 and Amendment No. 2 thereto filed with the Securities and Exchange Commission on February 6, 1992 and March 7, 1992, respectively.
2	Incorporated by reference to Registration Statement on Form S-1, File Number 33-48717 and Post-Effective Amendment No. 1 thereto filed with the Securities and Exchange Commission on June 22, 1992, and August 27, 1992, respectively.
3	

Incorporated by reference to Registration Statement on Form S-2, File Number 333-109442, filed with the Securities and Exchange Commission on October 3, 2003, and Amendment No.1 thereto filed with the Securities and Exchange Commission on November 13, 2003.

Table of Contents

4	Incorporated by reference to Registration Statement on Form S-2, File Number 333-128083, filed with the Securities and Exchange Commission on September 2, 2005.
5	Incorporated by reference to BioTime's Form 8-K, filed April 24, 1997.
6	Incorporated by reference to BioTime's Form 10-Q for the quarter ended June 30, 1999.
7	Incorporated by reference to BioTime's Form 10-K for the year ended December 31, 2001.
8	Incorporated by reference to BioTime's Form 10-K/A-1 for the year ended December 31, 2002.
9	Incorporated by reference to BioTime's Form 8-K, filed December 30, 2004.
10	Incorporated by reference to Post-Effective Amendment No. 3 to Registration Statement on Form S-2 File Number 333-109442, filed with the Securities and Exchange Commission on May 24, 2005.
11	Incorporated by reference to BioTime's Form 8-K, filed December 20, 2005.
12	Incorporated by reference to BioTime's Form 8-K, filed January 13, 2006.
13	Incorporated by reference to BioTime's Form 8-K, filed March 30, 2006.
14	Incorporated by reference to BioTime's Form 8-K, filed January 9, 2008.
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24	Incorporated by reference to BioTime's Form 10-Q for the quarter ended September30, 2009.
25	Filed herewith.

Table of Contents

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 on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on the 12th day of February, 2010.

BIOTIME, INC.

By: /s/Michael D. West
Michael D. West, Ph.D.
Chief Executive Officer

Signature	Title	Date
/s/Michael D. West MICHAEL D. WEST, PH.D.	Chief Executive Officer and Director (Principal Executive Officer)	February 12, 2010
/s/Steven A. Seinberg STEVEN A. SEINBERG	Chief Financial Officer (Principal Financial and Accounting Officer)	February 12, 2010
/s/Neal C. Bradsher NEAL C. BRADSHER	Director	February 12, 2010
ARNOLD I. BURNS	Director	February __, 2010
ROBERT N. BUTLER, MD	Director	February __, 2010
/s/Abraham E. Cohen ABRAHAM E. COHEN	Director	February 12, 2010
/s/Valeta Gregg VALETA GREGG, PH.D.	Director	February 12, 2010
ALFRED D. KINGSLEY	Director	February __, 2010
PEDRO LICHTINGER	Director	February __, 2010
/s/Judith Segall JUDITH SEGALL	Director	February 12, 2010

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Table of Contents

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83

Table of Contents

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84

Table of Contents

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