As filed with the Securities and Exchange Commission on May 5, 2011

Registration No. 333-167822

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

POST –EFFECTIVE AMENDMENT No. 1
to
FORM S-3

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

BIOTIME, INC.

(Exact name of Registrant as specified in charter)

California	**94-3127919**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
1301 Harbor Bay Parkway, Suite 100 **Alameda, California 94502** **(510) 521-3390**	**Judith Segall, Vice-President and Secretary** **BioTime, Inc.** **1301 Harbor Bay Parkway, Suite 100** **Alameda, California 94502** **(510) 521-3390**
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)	(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of all communications, including all communications sent to the agent for service, should be sent to:
RICHARD S. SOROKO, ESQ.
Thompson, Welch, Soroko & Gilbert LLP
201 Tamal Vista Blvd.
Corte Madera, California 94925
Tel. (415) 927-5200

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☐

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 of the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

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 Securities Exchange Act of 1934. (Check one):

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

PROSPECTUS

BIOTIME, INC.

300,000 Warrants
1,382,785 Common Shares
300,000 Common Shares Issuable Upon Exercise of Warrants

This prospectus relates to 1,382,785 common shares and 300,000 common share purchase warrants, and the common shares that may be issued upon the exercise of the warrants, held by the selling security holders named in this prospectus who acquired the common shares and warrants from us in connection with our acquisition of ES Cell International Pte Ltd. We will receive the exercise price of the warrants when the warrants are exercised. However, all of the net proceeds from the sale of the common shares and warrants, and any common shares issued upon the exercise of the warrants, by the selling security holders will belong to the selling security holders and not to us.

The common shares are quoted on the NYSE Amex under the symbol BTX. The closing price of the common shares on the NYSE Amex on May 4, 2011 was $6.54. There is presently no public market for the warrants offered by this prospectus.

These securities involve a high degree of risk and should be purchased only by persons who can afford the loss of their entire investment. See "Risk Factors" on page 8.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May __, 2011

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PROSPECTUS SUMMARY

The following summary explains only some of the information in this prospectus. More detailed information and financial statements appear elsewhere in this prospectus. Statements contained in this prospectus 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 "Risk Factors."

BioTime, Inc.

Overview

We are a biotechnology company engaged in two areas of biomedical research and product development. Initially we developed blood plasma volume expanders and related technology for use in surgery, emergency trauma treatment, and other applications. Currently we are focused on regenerative medicine, an emerging field of therapeutic product development based on recent discoveries in stem cell research.

Our lead blood plasma expander product, Hextend®, is a physiologically balanced intravenous solution used in the treatment of hypovolemia, a condition caused by low blood volume, often from blood loss during surgery or injury. Hextend maintains circulatory system fluid volume and blood pressure, and keeps vital organs perfused during surgery and trauma care.

"Regenerative medicine" refers to an emerging field of therapeutic product development that may allow all human cell and tissue types to be manufactured on an industrial scale. Historically speaking, this has never been possible in the past, and was made possible by the first isolation of human embryonic stem ("hES") cells and creation of induced pluripotent stem ("iPS") cells. These cells are called "pluripotent stem cells" because they have the unique property of being able to branch out into each and every kind of cell in the human body such as the cell types that make up the brain, the blood, the heart, the lungs, the liver, and other tissues. Unlike adult-derived stem cells that have limited potential to become different cell types, pluripotent stem cells may have vast potential to supply an array of new regenerative therapeutic products, especially those targeting the large and growing markets associated with age-related degenerative disease. Unlike pharmaceuticals that require a molecular target, therapeutic strategies in regenerative medicine are generally aimed at simply regenerating the affected cells and tissues, and therefore may have broader applicability.

Our efforts in regenerative medicine include the development and sale of products designed for therapeutic as well as research applications. We offer advanced human stem cell products and technology that can be used by researchers at universities, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. Research products generally can be marketed without regulatory approval, and are therefore relatively near-term business opportunities, especially when compared to therapeutic products.

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

We were incorporated in 1990 in the state of California. Our principal executive offices are located at 1301 Harbor Bay Parkway, Alameda, California 94502. Our telephone number is (510) 521-3390.

Stem Cells and Products for Regenerative Medicine Research

One of our aims is to develop cell replacement therapies for age-related degenerative disease. The degenerative diseases of aging are an attractive business opportunity because the elderly comprise a large and growing segment of our population, and because many age related diseases appear to be caused by the inherent limited capacity of aged human cells to regenerate damaged tissues in the body. This latter characteristic means that age related diseases may be best treated with cell replacement therapies. The restoration of functionality in tissues through cell replacement therapy may eliminate the high costs associated with years of palliative care.

Our effort in regenerative medicine also includes research on more than 140 purified, scalable, and novel human embryonic progenitor cell types produced from hES cells. This research has included extensive gene expression studies of the unique properties of the cells, as well as conditions that cause the cells to differentiate into many of the cell types in the body. We have filed patent applications on the compositions of these cells, the media in which they can be expanded, and a variety of uses of the cells, including drug discovery and cell replacement therapies.

We have organized several subsidiaries to undertake our cell replacement therapeutic programs. We will partly or wholly fund these subsidiaries, recruit their management teams, assist them in acquiring technology, and provide general guidance for building the subsidiary companies. We may license patents and technology to the subsidiaries that we do not wholly own under agreements that will entitle us to receive royalty payments from the commercialization of products or technology developed by the subsidiaries.

Our subsidiaries, OncoCyte Corporation, OrthoCyte Corporation, ReCyte Therapeutics, Inc., Cell Cure Neurosciences Ltd, and BioTime Asia, Limited, will attempt to develop human stem cell products for therapeutic uses. We and our Singapore-based subsidiary ES Cell International Pte Ltd (“ESI”) will sell stem cell products for research use and we will license certain technology to the subsidiaries for their therapeutic product 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. OrthoCyte will seek to develop cellular therapeutics for the treatment of orthopedic degenerative diseases and disorders and injuries. OrthoCyte will also sell, for research use, biocompatible hydrogels that mimic the human extracellular matrix. ReCyte will seek to develop therapeutic products for cardiovascular and blood diseases and disorders. Cell Cure Neurosciences will seek to develop therapeutic products for retinal and neurological degenerative diseases and disorders. BioTime Asia will initially seek to develop therapeutic products for the treatment of ophthalmologic, skin, musculoskeletal system, and hematologic diseases, including the targeting of genetically modified stem cells to tumors to treat cancer.

The following table shows our subsidiaries, their respective principal fields of business, our percentage ownership, and the country where their principal business is located:

Subsidiary	Field of Business	BioTime Ownership	Country
ReCyte Therapeutics, Inc.	Blood and vascular diseases including coronary artery disease iPS cell banking	95.15%	USA
OncoCyte Corporation	Cancer	74%	USA
OrthoCyte Corporation	Orthopedic diseases, including osteoarthritis Biocompatible hydrogels that mimic the human extracellular matrix	100%	USA
ES Cell International Pte. Ltd.	Stem cell products for research, including clinical GMP cell lines	100%	Singapore
BioTime Asia, Ltd.	Ophthalmologic, skin, musculo-skeletal system, and hematologic diseases. Stem cell products for research	81%	Hong Kong
Cell Cure Neurosciences, Ltd.	Age-related macular degeneration Multiple sclerosis Parkinson’s disease	53.6%	Israel
LifeMap Sciences, Inc.	Stem cell data base	100%	USA

We and some of our subsidiaries are also developing and selling 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 providing 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 inexpensively than would be possible with the development of therapeutic products alone.

The stem cell products we are offering for research use include approximately 92 human embryonic progenitor cell (“hEPC”) lines generated through the use of our ACTCellerate™ technology. We are also offering optimized ESpan™ growth media for the in vitro propagation of each hEPC line. The hEPCs are cells that are intermediate in the developmental process between embryonic stem cells and fully differentiated cells. hEPCs are expected to possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapies. hEPCs are relatively easy to manufacture on a large scale and in a purified state, which may make it more advantageous to work with these cells than with hES or iPS cells directly. We also plan to market additional cell types manufactured with our proprietary PureStem™ technology. PureStem™ cell lines are produced by the exogenous expression of specific transcription factors that regulate the differentiation of diverse cell types from hES or iPS cells. This technology when combined with ACTCellerate™ is expected to expand our offering of new human cell types for research and potentially therapeutic applications.

Our subsidiary, ESI, markets other stem cell research products such as human embryonic stem cell lines produced under good manufacturing practice (“GMP”) - compliant conditions. During November and December 2010, we signed agreements with the California Institute for Regenerative Medicine (“CIRM”) and the University of California system to distribute to California-based researchers five research-grade and GMP compliant hES cell lines produced by ESI. We believe that making the GMP-grade cell lines available to researchers may streamline the translation of basic science into therapies. Initially, we are providing research-grade cell lines free of charge to CIRM-funded and California-based researchers until April 30, 2011. After that date, researchers will purchase the research-grade cells from us at a price of $2,600 per ampoule. We plan to make the GMP-grade cell lines, along with certain documentation and complete genomic DNA sequence information, available by November 2011. We will charge a price for the GMP-grade cell lines that covers our production and delivery costs. Although no royalties will be payable to us by researchers who acquire the cell lines for research use, researchers who desire to use the GMP cell lines for therapeutic or diagnostic products, or for any other commercial purposes, may do so only after signing commercialization agreements acceptable to us. Commercialization agreements under this program will entitle us to receive royalties on net sales not to exceed 2% of net sales, reducible to 1.5% if the researcher must pay any other royalties in connection with the commercialization of their product.

Through its recent acquisition of Glycosan BioSystems, Inc, our subsidiary OrthoCyte acquired Glycosan's line of proprietary biocompatible hydrogels that mimic the human extracellular matrix (ECM). The human ECM is a web of molecules surrounding cells that is essential to the formation, function, and growth of discrete tissues and organs in the body. Glycosan's *HyStem*® hydrogels have the demonstrated ability to support the growth and directed differentiation of stem cells, and are designed as injectable, resorbable matrices for tissue engineering, regenerative medicine, and for research applications involving the laboratory culture of human cells. OrthoCyte will continue the marketing of the *HyStem*® and other Glycosan products for research use, and may also seek regulatory approval for the use of one Glycosan hydrogel, *HyStem*®*-Rx*, as a stand-alone cell delivery device that can be used in reconstruction and cosmetic surgery and other cell transplant procedures in countries outside of the United States.

During April 2011, we organized a new subsidiary, LifeMap Sciences, Inc., to advance the development and commercialization of our embryonic stem cell database. The new expanded data will address all known human branches in the mammalian developmental tree, including several thousand stem and progenitor cells, and related information such as anatomy, differentially-expressed gene signatures, and research reagents. Our plan is to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis. The database will permit users to follow the development of embryonic stem cell lines to the purified progenitor cell lines created by us using our proprietary ACTCellerate™ technology.

Plasma Volume Expander Products

We develop blood plasma volume expanders, blood replacement solutions for hypothermic (low temperature) surgery, organ preservation solutions, and technology for use in surgery, emergency trauma treatment, and other applications. 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 manufactured and distributed in the United States by Hospira, Inc., and in South Korea by CJ CheilJedang Corp., under license from us.

Offering Summary

How to Exercise Warrants	● The warrants are evidenced by warrant certificates. ● Warrants may be exercised by completing the purchase form on the back of the warrant certificate and delivering it, together with payment of the exercise price, to BioTime, Inc., 1301 Harbor Bay Parkway, Suite 100, Alameda, California 94502; Attention: Chief Financial Officer. ● Payment of the exercise price of the warrants must be made in cash or by certified or bank cashier's check or by wire transfer.
Other Terms of Warrants:	● Each warrant entitles the holder to purchase one common share at a price of $10.00 per share. ● The warrants will expire at 5:00 p.m., New York time, on May 2, 2014 and may not be exercised after that time and date. ● The number of common shares and the exercise price will be proportionally adjusted in the event of a stock split, stock dividend, combination, or similar recapitalization of the common shares. ● The number of common shares will be adjusted according to a formula provided for in the warrants in the event that we issue rights, options, or warrants to our stockholders entitling them to purchase common shares at a price per share which is lower at the record date than the then current market price per share of common shares.
Common Shares Offered	1,382,785 outstanding common shares and 300,000 common shares issuable upon the exercise of the warrants are being offered by the selling security holders.
Warrants Offered	300,000 warrants are being offered by one of the selling security holders.
Common Shares Outstanding	48,799,326 shares as of April 25, 2011

RISK FACTORS

An investment in our shares and warrants involves a high degree of risk. You should purchase our shares and warrants only if you can afford to lose your entire investment. Before deciding to purchase any of the shares or warrants offered by this prospectus, you should consider the following factors which could materially adversely affect our proposed operations, our business prospects, and the value of an investment in our shares and warrants. There may be other factors that are not mentioned here or of which we are not presently aware that could also affect our operations or the value of the securities offered by this prospectus.

Risks Related to Our Business Operations

We have incurred operating losses since inception and we do not know if we will attain profitability

Our net losses for the three month period ended March 31, 2011 and the fiscal years ended December 31, 2010, 2009 and 2008 were $4,032,137, $10,287,280, $5,144,499, and $3,780,895, respectively, and we had an accumulated deficit of $67,316,641 as of March 31, 2011, and $63,954,509, $52,769,891, and $47,625,392 as of December 31, 2010, 2009, and 2008, respectively. 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. Also, we have been awarded a research grant from CIRM and the U.S. Government's Qualifying Therapeutic Discovery Project ("QTDP"). Ultimately, our ability to generate sufficient operating revenue to earn a profit depends upon our success in developing and marketing or licensing our products and technology.

We will spend a substantial amount of our capital on research and development but we might not succeed in developing products and technologies that are useful in medicine

- We are attempting to develop new medical products and technologies.

- Many of our experimental products and technologies have not been applied in human medicine and have only been used in laboratory studies *in vitro* or in animals. These new products and technologies might not prove to be safe and efficacious in the human medical applications for which they were developed.

- The experimentation we are doing is costly, time consuming, and uncertain as to its results. We incurred research and development expenses amounting to $2,855,669, $7,892,024, $2,968,987, and $1,725,187 during the three month period ended March 31, 2011 and the fiscal years ended December 31, 2010, 2009 and 2008, respectively.

- If we are successful in developing a new technology or product, refinement of the new technology or product and definition of the practical applications and limitations of the technology or product may take years and require the expenditure of large sums of money.

- Future clinical trials of new therapeutic products will be very expensive and will take years to complete. We may not have the financial resources to fund clinical trials on our own and we may have to enter into licensing or collaborative arrangements with larger, well-capitalized pharmaceutical companies in order to bear the cost. Any such arrangements may be dilutive to our ownership or economic interest in the products we develop, and we might have to accept a royalty payment on the sale of the product rather than receiving the gross revenues from product sales.

Our success depends in part on the uncertain growth of the stem cell industry, which is still in its infancy

- The success of our business of selling products for use in stem cell research depends on the growth of stem cell research, without which there may be no market or only a very small market for our products and technology. The likelihood that stem cell research will grow depends upon the successful development of stem cell products that can be used to treat disease or injuries in people or that can be used to facilitate the development of other pharmaceutical products. The growth in stem cell research also depends upon the availability of funding through private investment and government research grants.

- There can be no assurance that any safe and efficacious human medical applications will be developed using stem cells or related technology.

- Government-imposed restrictions and religious, moral, and ethical concerns with respect to use of embryos or human embryonic stem cells in research and development could have a material adverse effect on the growth of the stem cell industry, even if research proves that useful medical products can be developed using human embryonic stem cells.

We plan to invest in the development of a stem cell data base but there is no assurance that the data base, if successfully completed, can be profitably commercialized

We recently formed a new subsidiary, LifeMap Sciences, to advance the development and commercialization of our embryonic stem cell database. We have invested approximately $833,000 in LifeMap Sciences and we plan to invest approximately $1,166,000 more by July 1, 2012 if certain database development milestones are attained and certain other conditions are met it. Our plan is to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis, but there is no assurance that the data base will be successfully completed or that LifeMap Sciences will be able to generate sufficient paid subscriptions for use of the data base to allow us to recover our investment or earn a profit.

Sales of our products to date have not been sufficient to generate an amount of revenue sufficient to cover our operating expenses

- Hextend is presently the only plasma expander product that we have on the market, and it is being sold only in the United States and South Korea. The royalty revenues that we have received from sales of Hextend have not been sufficient to pay our operating expenses. This means that we need to successfully develop and market or license additional products and earn additional revenues in sufficient amounts to meet our operating expenses.

- We will receive additional license fees and royalties if our licensees are successful in marketing Hextend and PentaLyte in Japan, Taiwan, and China, but they have not yet obtained the regulatory approvals required to begin selling those products.

- We are also beginning to bring our first stem cell research products to the market, but there is no assurance that we will succeed in generating significant revenues from the sale of those products.

Sales of our plasma volume expander products may be adversely impacted by the availability of competing products

- Hextend and our other plasma expander products will compete with other products that are commonly used in surgery and trauma care and sell at lower prices.

- In order to compete with other products, particularly those that sell at lower prices, our products will have to provide medically significant advantages.

- Physicians and hospitals may be reluctant to try a new product due to the high degree of risk associated with the application of new technologies and products in the field of human medicine.

- Competing products are being manufactured and marketed by established pharmaceutical companies. For example, B. Braun/McGaw presently markets Hespan, an artificial plasma volume expander, and Hospira and Baxter International, Inc. manufacture and sell a generic equivalent of Hespan.

- There also is a risk that our competitors may succeed at developing safer or more effective products that could render our products and technologies obsolete or noncompetitive.

We might need to issue additional equity or debt securities in order to raise additional capital needed to pay our operating expenses

- We plan to continue to incur substantial research and product development expenses, largely through our subsidiaries, and we and our subsidiaries will need to raise additional capital to pay operating expenses until we are able to generate sufficient revenues from product sales, royalties, and license fees.

- It is likely that additional sales of equity or debt securities will be required to meet our short-term capital needs, unless we receive substantial revenues from the sale of our new products or we are successful at licensing or sublicensing the technology that we develop or acquire from others and we receive substantial licensing fees and royalties.

- Sales of additional equity securities by us or our subsidiaries could result in the dilution of the interests of present shareholders.

The amount and pace of research and development work that we and our subsidiaries can do or sponsor, and our ability to commence and complete clinical trials required to obtain regulatory approval to market our pharmaceutical and medical device products, depends upon the amount of money we have

- At March 31, 2011, we had $30,136,979 of cash and cash equivalents on hand. There can be no assurance that we or our subsidiaries will be able to raise additional funds on favorable terms or at all, or that any funds raised will be sufficient to permit us or our subsidiaries to develop and market our products and technology. Unless we and our subsidiaries are able to generate sufficient revenue or raise additional funds when needed, it is likely that we will be unable to continue our planned activities, even if we make progress in our research and development projects.

- We have already curtailed the pace and scope of our plasma volume expander development efforts due to the limited amount of funds available, and we may have to postpone other laboratory research and development work unless our cash resources increase through a growth in revenues or additional equity investment or borrowing.

Our business could be adversely affected if we lose the services of the key personnel upon whom we depend

Our stem cell research program is directed primarily by our Chief Executive Officer, Dr. Michael West. The loss of Dr. West's services could have a material adverse effect on us.

Risks Related to Our Industry

We will face certain risks arising from regulatory, legal, and economic factors that affect our business and the business of other pharmaceutical development companies. Because we are a small company with limited revenues and limited capital resources, we may be less able to bear the financial impact of these risks than is the case with larger companies possessing substantial income and available capital.

If we do not receive regulatory approvals we will not be permitted to sell our pharmaceutical and medical device products

The pharmaceutical and medical device products that we and our subsidiaries develop cannot be sold until the United States Food and Drug Administration ("FDA") and corresponding foreign regulatory authorities approve the products for medical use. The need to obtain regulatory approval to market a new product means that:

- We will have to conduct expensive and time-consuming clinical trials of new products. The full cost of conducting and completing clinical trials necessary to obtain FDA and foreign regulatory approval of a new product cannot be presently determined, but could exceed our current financial resources.

- We will incur the expense and delay inherent in seeking FDA and foreign regulatory approval of new products, even if the results of clinical trials are favorable. For example, 12 months elapsed between the date we filed our application to market Hextend in the United States and the date on which our application was approved. Approximately 36 months elapsed between the date we filed our application for approval to market Hextend in Canada, and the date on which our application was approved, even though we did not have to conduct any additional clinical trials.

- Data obtained from preclinical and clinical studies is susceptible to varying interpretations that could delay, limit, or prevent regulatory agency approvals. Delays in the regulatory approval process or rejections of an application for approval of a new drug may be encountered as a result of changes in regulatory agency policy.

- Because the therapeutic products we are developing with hES and iPS technology involve the application of new technologies and approaches to medicine, the FDA or foreign regulatory agencies may subject those products to additional or more stringent review than drugs or biologicals derived from other technologies.

- A product that is approved may be subject to restrictions on use.

- The FDA can recall or withdraw approval of a product if problems arise.

- We will face similar regulatory issues in foreign countries.

Government-imposed restrictions and religious, moral, and ethical concerns about the use of hES cells could prevent us from developing and successfully marketing stem cell products

- Government-imposed restrictions with respect to the use of embryos or human embryonic stem cells in research and development could limit our ability to conduct research and develop new products.

- Government-imposed restrictions on the use of embryos or hES cells in the United States and abroad could generally constrain stem cell research, thereby limiting the market and demand for our products. During March 2009, President Obama lifted certain restrictions on federal funding of research involving the use of hES cells, and in accordance with President Obama's Executive Order, the National Institutes of Health ("NIH") has adopted new guidelines for determining the eligibility of hES cell lines for use in federally funded research. The central focus of the proposed 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. The 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. A lawsuit, *Sherley v. Sebelius*, is now pending, challenging the legality of the new NIH guidelines. In that litigation, a United States District Court issued a temporary injunction against the implementation of the new NIH guidelines, but the District Court's ruling has been vacated by the United States Court of Appeals. The ultimate resolution of that lawsuit could determine whether the federal government may fund research using hES cells, unless new legislation is passed expressly permitting or prohibiting such funding.

- California law requires that stem cell research be conducted under the oversight of a stem cell research oversight committee ("SCRO"). Many kinds of stem cell research, including the derivation of new hES cell lines, may only be conducted in California with the prior written approval of the SCRO. A SCRO could prohibit or impose restrictions on the research that we plan to do.

- The use of hES cells gives rise to religious, moral, and ethical issues regarding the appropriate means of obtaining the cells and the appropriate use and disposal of the cells. These considerations could lead to more restrictive government regulations or could generally constrain stem cell research, thereby limiting the market and demand for our products.

If we are unable to obtain and enforce patents and to protect our trade secrets, others could use our technology to compete with us, which could limit opportunities for us to generate revenues by licensing our technology and selling products

- Our success will depend in part on our ability to obtain and enforce patents and maintain trade secrets in the United States and in other countries. If we are unsuccessful at obtaining and enforcing patents, our competitors could use our technology and create products that compete with our products, without paying license fees or royalties to us.

- The preparation, filing, and prosecution of patent applications can be costly and time consuming. Our limited financial resources may not permit us to pursue patent protection of all of our technology and products throughout the world.

- Even if we are able to obtain issued patents covering our technology or products, we may have to incur substantial legal fees and other expenses to enforce our patent rights in order to protect our technology and products from infringing uses. We may not have the financial resources to finance the litigation required to preserve our patent and trade secret rights.

There is no certainty that our pending or future patent applications will result in the issuance of patents

- We have filed patent applications for technology that we have developed, and we have obtained licenses for a number of patent applications covering technology developed by others, that we believe will be useful in producing new products, and which we believe may be of commercial interest to other companies that may be willing to sublicense the technology for fees or royalty payments. In the future, we may also file additional new patent applications seeking patent protection for new technology or products that we develop ourselves or jointly with others. However, there is no assurance that any of our licensed patent applications, or any patent applications that we have filed or that we may file in the future covering our own technology, either in the United States or abroad, will result in the issuance of patents.

- 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.

The process of applying for and obtaining patents can be expensive and slow

- The preparation and filing of patent applications, and the maintenance of patents that are issued, may require substantial time and money.

- A patent interference proceeding may be instituted with the United States Patent and Trademark Officer ("U.S. 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.

- Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. As with the U.S. 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.

Our patents may not protect our products from competition

We or our subsidiaries have patents in the United States, Canada, the European Union countries, Australia, Israel, Russia, South Africa, South Korea, Japan, Hong Kong, and Singapore, and have filed patent applications in other foreign countries for our plasma volume expander and stem cell products and technology.

- We might not be able to obtain any additional patents, and any patents that we do obtain might not be comprehensive enough to provide us with meaningful patent protection.

- There will always be a risk that our competitors might be able to successfully challenge the validity or enforceability of any patent issued to us.

- In addition to interference proceedings, the U.S. PTO can re-examine 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 re-examination and may be lost if the outcome of the re-examination is unfavorable to us.

We may be subject to patent infringement claims that could be costly to defend, which may limit our ability to use disputed technologies, and which could prevent us from pursuing research and development or commercialization of some of our products

The success of our business depends significantly on our ability to operate without infringing patents and other proprietary rights of others. If the technology that we use infringes a patent held by others, we could be sued for monetary damages by the patent holder or its licensee, or we could be prevented from continuing research, development, and commercialization of products that rely on that technology, unless we are able to obtain a license to use the patent. The cost and availability of a license to a patent cannot be predicted, and the likelihood of obtaining a license at an acceptable cost would be lower if the patent holder or any of its licensees is using the patent to develop or market a product with which our product would compete. If we could not obtain a necessary license, we would need to develop or obtain rights to alternative technologies, which could prove costly and could cause delays in product development, or we could be forced to discontinue the development or marketing of any products that were developed using the technology covered by the patent.

If we fail to meet our obligations under license agreements, we may lose our rights to key technologies on which our business depends

Our business depends on several critical technologies that are based in part on technology licensed from third parties. Those third-party license agreements impose obligations on us, including payment obligations and obligations to pursue development of commercial products under the licensed patents or technology. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time-consuming litigation and, potentially, a loss of the licensed rights. During the period of any such litigation, our ability to carry out the development and commercialization of potential products, and our ability to raise any capital that we might then need, could be significantly and negatively affected. If our license rights were restricted or ultimately lost, we would not be able to continue to use the licensed technology in our business.

The price and sale of our products may be limited by health insurance coverage and government regulation

Success in selling our pharmaceutical products may depend in part on the extent to which health insurance companies, HMOs, and government health administration authorities such as Medicare and Medicaid will pay for the cost of the products and related treatment. Presently, most health insurance plans and HMOs will pay for Hextend when it is used in a surgical procedure that is covered by the plan. However, until we actually introduce a new product into the medical marketplace, we will not know with certainty whether adequate health insurance, HMO, and government coverage will be available to permit the product to be sold at a price high enough for us to generate a profit. In some foreign countries, pricing or profitability of health care products is subject to government control, which may result in low prices for our products. In the United States, there have been a number of federal and state proposals to implement similar government controls, and new proposals are likely to be made in the future.

Risks Pertaining to Our Common Shares and Warrants

Ownership of our common shares and warrants will entail certain risks associated with the volatility of prices for our shares, the fact that we do not pay dividends on our common shares, and the fact that there is no public market for our warrants.

Because we are engaged in the development of pharmaceutical and stem cell research products, the price of our stock may rise and fall rapidly

- The market price of our shares, like that of the shares of many biotechnology companies, has been highly volatile.

- The price of our shares may rise rapidly in response to certain events, such as the commencement of clinical trials of an experimental new drug, even though the outcome of those trials and the likelihood of ultimate FDA approval remain uncertain.

- Similarly, prices of our shares may fall rapidly in response to certain events such as unfavorable results of clinical trials or a delay or failure to obtain FDA approval.

- The failure of our earnings to meet analysts' expectations could result in a significant rapid decline in the market price of our common shares.

Current economic and stock market conditions may adversely affect the price of our common shares

The stock market has been experiencing extreme price and volume fluctuations which have affected the market price of the equity securities without regard to the operating performance of the issuing companies. Broad market fluctuations, as well as general economic and political conditions, may adversely affect the market price of the common shares.

Because we do not pay dividends, our stock may not be a suitable investment for anyone who needs to earn dividend income

We do not pay cash dividends on our common shares. For the foreseeable future, we anticipate that any earnings generated in our business will be used to finance the growth of our business and will not be paid out as dividends to our shareholders. This means that our stock may not be a suitable investment for anyone who needs to earn income from their investments.

There is no public market for the warrants offered by this prospectus

There is no public market for the warrants offered by this prospectus. Therefore, any investor who purchases warrants from a selling security holder may not be able to find a buyer for the warrants if the investor later desires to sell the warrants.

The warrants cannot be exercised unless a registration statement is in effect under federal securities laws

A registration statement as defined under the Securities Act of 1933, as amended (the "Securities Act"), must be in effect in order for warrant holders to exercise their warrants. This means that we will have to periodically update our registration statement and prospectus by filing reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or by filing post-effective amendments to the registration statement of which this prospectus is a part. We intend to use our best efforts to keep our registration statement effective. However, if we are unable to do so for any reason, warrant holders will not be able to exercise their warrants at such time, even if the market price of our common shares is then greater than the exercise price.

As long as our common shares are listed on the NYSE Amex, they will be exempt from registration or qualification under state securities laws. If our common shares are not exempt from state registration or qualification, most states will require us to obtain a permit, issued through an application for registration or qualification, and to maintain that permit in effect in order for warrant holders in the state to exercise their warrants. Many states will only issue a permit if their securities regulatory agency determines that the securities are a suitable investment for public investors in their state, considering a variety of factors, including the financial performance and financial condition of the company issuing the securities. Because we have a history of operating losses, some or all of those states may decline to issue the permit required to permit warrant holders in those states to exercise their warrants.

Securities analysts may not initiate coverage or continue to cover our common shares, and this may have a negative impact on the market price of our shares

The trading market for our common shares will depend, in part, on the research and reports that securities analysts publish about our business and our common shares. We do not have any control over these analysts. There is no guarantee that securities analysts will cover our common shares. If securities analysts do not cover our common shares, the lack of research coverage may adversely affect the market price of those shares. If securities analysts do cover our shares, they could issue reports or recommendations that are unfavorable to the price of our shares, and they could downgrade a previously favorable report or recommendation, and in either case our share price could decline as a result of the report. If one or more of these analysts does not initiate coverage, ceases to cover our shares or fails to publish regular reports on our business, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

You may experience dilution of your ownership interests because of the future issuance of additional shares of common and preferred shares by us and our subsidiaries

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our present shareholders. We are currently authorized to issue an aggregate of 76,000,000 shares of capital stock consisting of 75,000,000 common shares and 1,000,000 “blank check” preferred shares. As of March 31, 2011, there were 3,173,273 common shares reserved for issuance upon the exercise of outstanding options under our employee stock option plans; and 349,513 shares reserved for issuance upon the exercise of common share purchase warrants other than the warrants included in this prospectus. No preferred shares are presently outstanding.

The operation of some of our subsidiaries has been financed in part through the sale of capital stock in those subsidiaries to private investors. Sales of additional subsidiary shares could reduce our ownership interest in the subsidiaries, and correspondingly dilute our shareholder’s ownership interests in our consolidated enterprise. Our subsidiaries also have their own stock option plans and the exercise of subsidiary stock options or the sale of restricted stock under those plans would also reduce our ownership interest in the subsidiaries, with a resulting dilutive effect on the ownership interest of our shareholders in our consolidated enterprise.

We and our subsidiaries may issue additional common shares or other securities that are convertible into or exercisable for common shares in order to raise additional capital, or in connection with hiring or retaining employees or consultants, or in connection with future acquisitions of licenses to technology or rights to acquire products, or in connection with future business acquisitions, or for other business purposes. The future issuance of any such additional common shares or other securities may create downward pressure on the trading price of our common shares.

We may also issue preferred shares having rights, preferences, and privileges senior to the rights of our common shares with respect to dividends, rights to share in distributions of our assets if we liquidate our company, or voting rights. Any preferred shares may also be convertible into common shares on terms that would be dilutive to holders of common shares. Our subsidiaries may also issue their own preferred shares with a similar dilutive impact on our ownership of the subsidiaries.

MARKET FOR OUR COMMON EQUITY

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. On October 12, 2010, BioTime changed its ticker symbol to BTX.

There is presently no public market for the warrants offered by this prospectus, and a public market for the warrants may not develop.

The following table sets forth the range of high and low closing prices for our common shares for the fiscal years ended December 31, 2009 and 2010 and the quarter ended March 31, 2011, based on transaction data as reported by the OTCBB and NYSE Amex:

Quarter Ended	High	Low
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
March 31, 2010	$8.42	$4.27
June 30, 2010	$8.20	$5.25
September 30, 2010	$6.50	$4.02
December 31, 2010	$9.94	$4.73
March 31, 2011	$9.50	$6.53

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 January 12, 2011, there were 13,729 holders of the common shares based on the share position listing.

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, 2010:

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**
BioTime Equity Compensation Plans Approved by Shareholders	3,320,590	$ 1.51	1,842,168
BioTime Equity Compensation Plans Not Approved by Shareholders*	249,000	$ 7.46	-

*We have granted 249,000 warrants to certain consultants for providing services to us. These warrants were issued without registration under the Securities Act of 1933, as amended, in reliance upon the exemption provided by Section 4(2) thereunder.

The following table shows certain information concerning the options outstanding and available for issuance under all of the compensation plans and agreements for our subsidiary companies as of December 31, 2010:

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
OrthoCyte Equity Compensation Plans Approved by Shareholders**	2,300,000	$ 0.08	1,700,000
OncoCyte Equity Compensation Plans Approved by Shareholders**	1,000,000	$ 0.67	3,000,000
ReCyte Therapeutics Equity Compensation Plans Approved by Shareholders**	1,000,000	$ 2.05	3,000,000
BioTime Asia Equity Compensation Plans Approved by Shareholders**	400	$ 0.01	1,200
Cell Cure Neurosciences Compensation Plans Approved by Shareholders**	23,978	$ 8.58	1,860

**BioTime is the majority shareholder.

Additional information concerning our stock option plan and the stock options of our subsidiaries may be found in Note 11 to Consolidated Financial Statements contained in our Annual Report on Form 10-K for the year ended December 31, 2010 which is incorporated by reference into this prospectus.

Dividend Policy

We have never paid cash dividends on our capital stock and do not anticipate paying cash dividends in the foreseeable future, but intend to retain our capital resources for reinvestment in our business. Any future determination to pay cash dividends will be at the discretion of our Board of Directors and will be dependent upon our financial condition, results of operations, capital requirements and other factors as the Board of Directors deems relevant.

USE OF PROCEEDS

All of the common shares and common shares issuable upon exercise of the warrants are being sold by selling security holders identified in this prospectus. All of the net proceeds from the sale of the common shares and warrants, and any common shares issued upon the exercise of the warrants, by the selling security holders will belong to the selling security holders and not to us.

The cash proceeds receivable from the exercise of the warrants included in this prospectus will be $3,000,000, if all of the warrants are exercised at the exercise price of $10 per share. We intend to use the proceeds from the exercise of the warrants as shown in the following table.

Application	Estimated Amount	Percent of Total
Research and Development	$ 1,950,000	65%
General and Administrative	450,000	15%
Working Capital	$ 600,000	20%
Total	$ 3,000,000	100%

Research and Development . Proceeds allocated to research and development may be used by us or invested in one or more of our subsidiaries, ESI, OncoCyte, OrthoCyte, BioTime Asia, and Cell Cure, to develop stem cell products and technology and to acquire new stem cell products and technology through licenses or similar agreements from other companies. We may also invest proceeds in OrthoCyte to finance the cost of human clinical trials and applications for regulatory approval to market HyStem-Rx as a medical device outside the United States. We may also use proceeds for additional clinical trials of PentaLyte and to fund the cost of seeking regulatory approval of PentaLyte, and to begin human clinical trials for new indications of our lead product Hextend®, including the treatment of severe malaria by reducing the acidosis and hypovolemia that accompany that disease, and often result in fatalities, especially among children. We are also considering a number of opportunities to enter new market segments that may complement our current product develop programs, and a portion of the proceeds may be used for those purposes.

General and Administrative. Portions of the proceeds may be used to defray overhead expenses, and may also be put toward future opportunities and contingencies that might arise, including the payment of costs incurred in retaining various personnel or securing various services necessary to support the advancement of our research and development programs. A portion of the salaries, benefits, and fees of employees and consultants who assist in the development of new products or in the preparation of patent applications or applications to the FDA and foreign regulatory agencies is allocable to general and administrative costs. We will also incur general and administrative expenses for payment of any of the various legal, accounting, governmental, and stock exchange costs inherent in operating as a publicly traded company. We expect that our general and administrative expenses will increase as we achieve progress in developing products and bringing them to market.

Working Capital. We intend to apply the balance of the proceeds from the exercise of the warrants to working capital. We will have broad discretion with respect to the use of such amounts. Proceeds allocated to working capital may also be reallocated to research and development expense or to general and administrative expense should such needs arise, and may be used to pay any of the costs of developing new products, obtaining new technology, or conducting clinical trials of our products.

The preceding table represents only an estimate of the allocation of the net proceeds of the exercise of the warrants based upon the current state of our product development program. The timeframe in which we will use the proceeds will depend upon a variety of factors, such as the pace at which we and our subsidiaries make progress in our research and development programs, the results of clinical trials that we may undertake, and any opportunities to acquire new products and technologies, or to enter into new market segments that may arise, and the amounts of revenues that we may receive from the sale and licensing of our products and technologies.

The development of new medical products and technologies often involves complications, delays, and costs that cannot be predicted, and may cause us to make a reallocation of proceeds among the categories shown above or to other uses. We may need to raise additional capital to pay operating expenses until such time as we are able to generate sufficient revenues from product sales, royalties, and license fees.

Until used, the net proceeds from the exercise of the warrants will be invested in certificates of deposit, United States government securities, or other high quality, short-term, interest-bearing investments.

DESCRIPTION OF SECURITIES

Common Shares

Our Articles of Incorporation currently authorize the issuance of up to 75,000,000 common shares, no par value, of which 48,799,326 shares were outstanding at April 25, 2011. As of January 12, 2011, there were 13,729 holders of the common shares based on the share position listings. Each holder of record is entitled to one vote for each outstanding common share owned by him on every matter properly submitted to the shareholders for their vote.

Subject to the dividend rights of holders of any of the preferred shares that may be issued from time to time, holders of common shares are entitled to any dividend declared by the Board of Directors out of funds legally available for that purpose. We have not paid any cash dividends on our common shares, and it is unlikely that any cash dividends will be declared or paid on any common shares in the foreseeable future. Instead, we plan to retain our cash for use in financing our future operations and growth.

Subject to the prior payment of the liquidation preference to holders of any preferred shares that may be issued, holders of common shares are entitled to receive on a pro rata basis all of our remaining assets available for distribution to the holders of common shares in the event of the liquidation, dissolution, or winding up of our operations. Holders of common shares do not have any preemptive rights to become subscribers or purchasers of additional shares of any class of our capital stock.

Transfer Agent

The transfer agent and registrar for the common shares is American Stock Transfer and Trust Company, 59 Maiden Lane, New York, New York 10038.

Preferred Shares

Our Articles of Incorporation currently authorize the issuance of up to 1,000,000 preferred shares, no par value. We may issue preferred shares in one or more series, at any time, with such rights, preferences, privileges and restrictions as the Board of Directors may determine, all without further action of our shareholders. Any series of preferred shares which may be authorized by the Board of Directors in the future may be senior to and have greater rights and preferences than the common shares. There are no preferred shares presently outstanding and we have no present plan, arrangement, or commitment to issue any preferred shares.

Warrants

There are 300,000 of the warrants offered by in this prospectus outstanding. In addition to those warrants, we have also issued and outstanding 349,513 other warrants ("Other Warrants") that have terms and conditions that are different from those of the warrants included in this prospectus. The following description of the warrants does not pertain to the Other Warrants, which are separately described below.

Each full warrant offered by this prospectus entitles the holder to purchase one common share at a price of $10.00 per share. The number of common shares and exercise price will be proportionally adjusted in the event of a stock split, stock dividend, combination or similar recapitalization of the common shares. The number of common shares will be adjusted according to a formula provided for in the warrants in the event that we issue rights, options, or warrants to our stockholders entitling them to purchase common shares at a price per share which is lower at the record date than the then current market price per share of common shares. The warrants will expire on May 2, 2014 and may not be exercised after that date.

In order to exercise your warrants, in whole or in part, you must do all of the following:

- Fill in and sign the purchase form that appears on the reverse side of the warrant certificate;
- Deliver the completed and signed warrant certificate to us with your payment in full for the common shares you wish to purchase.
- Make payment for your shares – the method of doing so is described below under ''Payment for Shares.''
- Ensure that properly completed and executed warrant certificates are received by us at the address set forth below prior to 5:00 p.m., New York time, on May 2, 2014.

You should send your warrant certificate, with the purchase form completed and signed, accompanied by payment of the exercise price, to:

BioTime, Inc.
1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502
Attention: Chief Financial Officer.

Payment of the exercise price of the warrants must be made in cash or by certified or bank cashier's check drawn on a United States bank, or by wire transfer. We recommend that warrant holders who do not reside in the United States make their payment by wire transfer. All wire transfers should be directed to: Wells Fargo Bank, Emeryville, USA, ABA #121000248, Account #6783738021.

You may not revoke the exercise of your warrants.

Other Warrants

We have issued and outstanding 349,513 Other Warrants that have exercise prices, expiration dates, and other terms that are different from the warrants included in this prospectus. None of the Other Warrants are offered by this prospectus. The following table shows certain information concerning the Other Warrants.

Number of Warrants	Shares Issuable[(1)]	Exercise Price[(1)]	Expiration Date
92,900	92,900	$ 3.00	September 23, 2012
50,000	50,000	$ 10.00	April 24, 2014
206,613	206,613	$ 10.00	May 2, 2014

(1) The number of common shares and exercise price will be proportionally adjusted in the event of a stock split, stock dividend, combination, or similar recapitalization of the common shares.

RESALE OF SHARES AND WARRANTS

The common shares and warrants, and the common shares that may be issued upon the exercise of the warrants, are being registered for sale for the account of the holders of those securities. The security holders for whose account common shares warrants are being registered through this prospectus are sometimes referred to in this prospectus as "selling security holders," and information about them and the securities that they may sell through this prospectus is discussed in this section. The selling security holders may elect to sell some or all of their shares or warrants in reliance upon Rule 144 under the Securities Act rather than through this prospectus and the registration statement of which this prospectus is a part.

We will receive the exercise price of the warrants when the warrants are exercised. However, all of the net proceeds from the sale of the warrants and common shares by the selling security holders will belong to the selling security holder and not to us.

Plan of Distribution

We issued the common shares and warrants offered by this prospectus to the selling security holders in connection with our acquisition of ESI. The selling security holders have advised us that they may hold their common shares and warrants, and any common shares issued upon the exercise of their warrants, for investment purposes, or they may sell their common shares, including any common shares acquired through the exercise their warrants, from time to time on the NYSE Amex at prevailing market prices, or at prices related to the prevailing market price, or in privately negotiated transactions. The selling security holders may also sell some or all of their warrants in privately negotiated transactions.

The selling security holders will bear all broker-dealer commissions payable in connection with the sale of their common shares or warrants. Broker-dealers who acquire common shares or warrants from the selling security holders as principals may resell the common shares from time to time in transactions on the NYSE Amex, or may resell the common shares and warrants in negotiated transactions at negotiated prices, and may receive usual and customary commissions from the purchasers of the shares and warrants.

The selling security holders have advised us that during the time that they may be engaged in a distribution of their common shares and warrants they will (a) not engage in any stabilization activity in connection with our securities, (b) cause to be furnished to each broker through whom their shares or warrants may be offered the number of copies of this prospectus required by the broker, and (c) not bid for or purchase any of our securities or rights to acquire our securities, or attempt to induce any person to do so, other than as permitted under the Exchange Act. The selling security holders and any broker-dealers who participate in the sale of their common shares and warrants may be deemed to be “underwriters” as defined in the Securities Act. Any commissions paid or any discounts or concessions allowed to any broker-dealers in connection with the sale of the common shares and warrants, and any profits received on the resale of any shares and warrants purchased by broker-dealers as principals, may be deemed to be underwriting discounts and commissions under the Securities Act.

The following table shows the number of our common shares beneficially owned by the selling security holders prior to this offering, the maximum number of common shares that may be sold by them through this prospectus, and the amount and percentage of the outstanding common shares that will be owned by them if they sell all of the shares registered for their respective accounts:

Name	Shares Owned[1]	Shares Offered[1]	Shares Owned After Offering[1]	Percentage of Outstanding Common Shares Owned After Offering[1]
ES Cell Australia Limited	15,858	15,858	0	0
Pharmbio Growth Fund Pte Ltd[2]	24,616	24,616	0	0
Biomedical Sciences Investment Fund Pte Ltd[3]	1,323,277	1,323,277	0	0
Curis Inc.	6,461	6,461	0	0
Monash Investment Holdings Pty Ltd	3,692	3,692	0	0
NUS Technology Holdings Pte Ltd	3,835	3,835	0	0
Hadasit Medical Research Services and Development Company Ltd	3,692	3,692	0	0
Martin Frederick Pera	615	615	0	0
Christine Mummery	123	123	0	0
Hubrecht Institute	154	154	0	0
Nick Gough and Associates Pty Ltd	462	462	0	0

(1) Does not include shares issuable upon the exercise of the warrants including in this prospectus.

(2) Pharmbio Growth Fund Pte Ltd is wholly-owned by EDB Investments Pte Ltd, which is wholly-owned by the Economic Development Board of Singapore. No individual has beneficial ownership over shares held by Pharmbio Growth Fund Pte Ltd. Voting and investment decisions relating to these securities are made by the board of directors of Pharmbio Growth Fund Pte Ltd, which is currently comprised of Mr. Eugene Khoo Kay Jin and Ms. Ho Siu Gie. The board of directors of Pharmbio Growth Fund Pte Ltd acts by majority vote, and no board member may act individually to vote or sell these securities.

(3) Biomedical Sciences Investment Fund Pte Ltd is wholly-owned by EDB Investments Pte Ltd, which is wholly-owned by the Economic Development Board of Singapore. No individual has beneficial ownership over shares held by Biomedical Sciences Investment Fund Pte Ltd. Voting and investment decisions relating to these securities are made by the board of directors of Biomedical Sciences Investment Fund Pte Ltd, which is currently comprised of Ms. Chu Swee Yeok and Mr. Beh Kian Teik. The board of directors of Biomedical Sciences Investment Fund Pte Ltd acts by majority vote, and no board member may act individually to vote or sell these securities.

The following table shows the number of warrants beneficially owned by the selling security holders prior to this offering, the maximum number of warrants that may be sold by them through this prospectus, and the amount and percentage of the outstanding warrants that will be owned by them if they sell all of the warrants registered for their respective accounts:

Name	Warrants Owned	Warrants Offered	Warrants Owned After Offering	Percentage of Outstanding Warrants Owned After Offering
Biomedical Sciences Investment Fund Pte Ltd[(1)]	300,000	300,000	0	0

(1) Biomedical Sciences Investment Fund Pte Ltd is wholly-owned by EDB Investments Pte Ltd, which is wholly-owned by the Economic Development Board of Singapore. No individual has beneficial ownership over shares held by Biomedical Sciences Investment Fund Pte Ltd. Voting and investment decisions relating to these securities are made by the board of directors of Biomedical Sciences Investment Fund Pte Ltd, which is currently comprised of Ms. Chu Swee Yeok and Mr. Beh Kian Teik. The board of directors of Biomedical Sciences Investment Fund Pte Ltd acts by majority vote, and no board member may act individually to vote or sell these securities.

LEGAL MATTERS

The validity of the rights, common shares, and warrants will be passed upon for BioTime by Thompson, Welch, Soroko & Gilbert LLP, San Francisco and Corte Madera, California. A member of Thompson, Welch, Soroko & Gilbert LLP holds 10,000 BioTime common shares.

EXPERTS

The financial statements incorporated in this prospectus by reference from BioTime's Annual Report on Form 10-K for the years ended December 31, 2010 and 2009 have been audited by Rothstein, Kass & Company, P.C., independent registered public accounting firm, to the extent and for the periods set forth in their report incorporated herein by reference, and are incorporated herein in reliance upon such report given upon the authority of said firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Our Annual Report on Form 10-K, as amended, for the fiscal year ended December 31, 2010, our Quarterly Report on Form 10-Q for the three months ended March 31, 2011, and our Current Reports on Form 8-K filed by us with the Securities and Exchange Commission on March 22 and April 5, 2011 are hereby incorporated into this prospectus by reference. All other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering covered by this prospectus shall be deemed incorporated into this prospectus by reference. A description of the common shares contained in a Registration Statement on Form 8-A filed under the Securities Exchange Act of 1934, as amended, is also incorporated into this prospectus by reference. We will provide without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request of such person, a copy of any and all of the information that has been incorporated by reference but not delivered with this prospectus. Such requests may be addressed to the Secretary of BioTime at 1301 Harbor Bay Parkway, Suite 100, California 94502; Telephone: (510) 521-3390. The reports and other documents incorporated by reference may be accessed at our internet website *www.biotimeinc.com* .

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file quarterly, annual, and current reports and proxy statements and other information with the Securities and Exchange Commission. The public may read and copy any materials we file with Securities and Exchange Commission at the Commission's Public Reference Room at 100 F Street N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330.

The Commission maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the Commission. The address of such site is *http://www.sec.gov* .

We make available free of charge on or through our Internet website *www.biotimeinc.com* our annual report on Form 10–K, quarterly reports on Form 10–Q, current reports on Form 8–K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Commission.

We have filed with the Securities and Exchange Commission, 100 F Street N.E., Washington, D.C. a registration statement on Form S-3 under the Securities Act for the registration of the shares and warrants offered by this prospectus. This prospectus, which is part of the registration statement, does not contain all of the information contained in the registration statement. For further information with respect to us and the securities offered by this prospectus, you should refer to the registration statement, including the exhibits thereto, which may be inspected, without charge, at the Office of the Securities and Exchange Commission, or copies of which may be obtained from the Commission in Washington, D.C. upon payment of the requisite fees. Statements contained in this prospectus as to the content of any contract or other document referred to are not necessarily complete. In each instance reference is made to the copy of the contract or other document filed as an exhibit to the registration statement, and each such statement is qualified in all respects by reference to the exhibit.

No dealer, salesperson or other person has been authorized in connection with this offering to give any information or to make any representations other than those contained in this Prospectus. This Prospectus does not constitute an offer or a solicitation in any jurisdiction to any person to whom it is unlawful to make such an offer or solicitation. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create an implication that there has been no change in the circumstances of BioTime or the facts herein set forth since the date hereof.

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1,382,785 Common Shares

300,000 Warrants

300,000 Common Shares Issuable Upon Exercise of Warrants

PROSPECTUS

May __, 2011

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules.

Exhibit Numbers	Description
4.1	Specimen of Common Share Certificate (1)
4.2	Warrant Agreement between BioTime, Inc. and Biomedical Sciences Investment Fund Pte Ltd (2)
4.3	Warrant †
5.	Opinion of Counsel †
23.1	Consent of Rothstein, Kass & Company, P.C. *
23.2	Consent of Counsel (Included in Exhibit 5)

(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 Quarterly Report on Form 10-Q for the three months ended March 31, 2010.

† Previously filed.

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Post-Effective Amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Alameda, State of California on April 28, 2011.

BIOTIME, INC.

By /s/ Michael D. West
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment to the Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael D. West MICHAEL D. WEST, PH.D.	Chief Executive Officer and Director (Principal Executive Officer)	April 28, 2011
/s/ Robert W. Peabody ROBERT W. PEABODY	Chief Financial Officer (Principal Financial and Accounting Officer)	April 28, 2011
/s/ Neal C. Bradsher NEAL C. BRADSHER	Director	April 28, 2011
/s/ Arnold I. Burns ARNOLD I. BURNS	Director	April 28, 2011
_____ ABRAHAM E. COHEN	Director	April __, 2011
/s/ Alfred D. Kingsley ALFRED D. KINGSLEY	Director	April 28, 2011
_____ PEDRO LICHTINGER	Director	April __, 2011
/s/ Judith Segall JUDITH SEGALL	Director	April 28, 2011

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Post-Effective Amendment No. 1 to Form S-3 (Registration No. 333-167822) of our report dated March 10, 2011, with respect to the audit of the consolidated balance sheets of BioTime, Inc. and Subsidiaries (collectively the "Company") as of December 31, 2010 and 2009, and the related consolidated statements of operations, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2010, which report appears in the Annual Report on Form 10-K of the Company for the year ended December 31, 2010, and to the reference to our firm under the caption "Experts" in the prospectus.

/s/ Rothstein, Kass & Company, P.C.

Roseland, New Jersey
April 28, 2011