BIOTIME INC
Form S-3
April 22, 2013
As filed with the Securities and Exchange Commission on April 22, 2013

Registration No. _____

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

BIOTIME, INC.
(Exact name of Registrant as specified in charter)

California (State or other jurisdiction of incorporation or organization)	94-3127919 (I.R.S. Employer Identification Number)
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)	PETER S. GARCIA, Chief Financial Officer BioTime, Inc. 1301 Harbor Bay Parkway, Suite 100 Alameda, California 94502 (510) 521-3390 (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
3950 Civic Center Drive, Suite 300
San Rafael, California 94903
Tel. (415) 448-5000

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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

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. o

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. o

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. o

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. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Securities Exchange Act of 1934. (Check one):

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit (1)	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee
Common shares, no par value	2,882,260	$ 3.45	$ 9,943,797	$ 1,356.30
Warrants to purchase common shares	649,998			
Common shares, no par value(2)	649,998	$ 5.00	$ 3,249,990	$ 443.33
Total Registration Fee				$ 1,799.63

(1) Estimated solely for the purpose of calculating the registration fee.
(2) Issuable upon the exercise of warrants. An indeterminable number of additional common shares that may become issuable upon exercise of warrants pursuant to the anti-dilution provisions of the warrants are also being registered.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its Effective Date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated April 22, 2013

PROSPECTUS
BIOTIME, INC.
2,882,260 Common Shares
649,998 Warrants
649,998 Common Shares Issuable Upon the Exercise of Warrants

This prospectus relates to 1,423,553 BioTime common shares held by the selling security holders named in this prospectus, and 649,998 warrants (the "Investor Warrants") to purchase BioTime common shares, and an additional 649,998 BioTime common shares issuable upon the exercise of the Investor Warrants, held by one of those selling security holders. We will receive the exercise price of the Investor Warrants when the Investor Warrants are exercised. However, all of the net proceeds from the sale of the common shares or Investor Warrants by the selling security holders will belong to the selling security holders and not to us.

This prospectus also relates to 172,533 BioTime common shares held by our subsidiary LifeMap Sciences, Inc. and 1,286,174 BioTime common shares held by our subsidiary OncoCyte Corporation ("OncoCyte"), All of the net proceeds from the sale of the BioTime common shares held by LifeMap Sciences will belong to LifeMap Sciences, and all of the net proceeds from the sale of the BioTime common shares held by OncoCyte will belong to OncoCyte. See "USE OF PROCEEDS" on page 30. LifeMap Sciences and OncoCyte will each be an "underwriter" as defined in the Securities Act of 1933, as amended (the "Securities Act"), with respect to the BioTime common shares being offered for its account.

The common shares are quoted on the NYSE MKT under the symbol BTX. The closing price of the common shares on the NYSE MKT on April 19, 2013 was $3.79. There is no public market for the Investor 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 15.

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 April ___, 2013

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PROSPECTUS SUMMARY

Some of the statements in this prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements reflect our current views with respect to future events or our financial performance, and involve certain known and unknown risks, uncertainties and other factors, including those identified below, which may cause our or our industry's actual or future results, levels of activity, performance or achievements to differ materially from those expressed or implied by any forward-looking statements or from historical results. We intend the forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements include information concerning our possible or assumed future results of operations and statements preceded by, followed by, or that include the words "may," "will," "could," "would," "should," "believe," "expect," "plan," "anticipate," "intend," "estim "predict," "potential" or similar expressions.

Forward-looking statements are inherently subject to risks and uncertainties, many of which we cannot predict with accuracy and some of which we might not even anticipate. Although we believe that the expectations reflected in the forward-looking statements are based upon reasonable assumptions at the time made, we can give no assurance that the expectations will be achieved. Future events and actual results, financial and otherwise, may differ materially from the results discussed in the forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements. We have no duty to update or revise any forward-looking statements after the date of this prospectus or to conform them to actual results, new information, future events or otherwise.

BioTime, Inc.

References to "we," "us", and "our" mean BioTime, Inc. and its subsidiaries unless the context otherwise indicates. In this regard, references to "we," "us", and "our" in the context of rights or obligations under any contract or agreement mean BioTime, Inc. only and not its subsidiaries.

Overview

We are a biotechnology company focused on the emerging field of regenerative medicine. Our core technologies center on stem cells capable of becoming all of the cell types in the human body, a property called pluripotency. Products made from these "pluripotent" stem cells are being developed by us and our subsidiaries for use in different medical specialties, including: neuroscience, oncology, orthopedics, and blood and vascular diseases. Our commercial strategy is heavily focused on near-term commercial opportunities including our current line of research products such as PureStem™ cell lines (which we previously called ACTCellerate™ cell lines) and associated ESpan™ culture media, HyStem® hydrogels, human embryonic stem cell lines, and royalties from Hextend®. Potential near term therapeutic and diagnostic product opportunities include Renevia™ (formerly known as HyStem®-Rx) as a cell delivery device expected to enter clinical trials in Europe in 2013, and PanC-Dx™ which we expect will be launched as a novel blood-based cancer screen by 2014 in Europe. Our long-term strategic focus is to provide regenerative therapies for age-related degenerative diseases.

"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. This new technology is made possible by the isolation of human embryonic stem ("hES") cells, and by the development of "induced pluripotent stem ("iPS") cells" which are created from regular cells of the human body using technology that allows adult cells to be "reprogrammed" into cells with pluripotency like young hES-like cells. These pluripotent hES and iPS cells have the unique property of being able to branch out into each and every kind of cell in the human body, including 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 regenerating affected cells and tissues, and therefore may have broader applicability. Regenerative medicine represents a revolution in the field of biotechnology with the promise of providing therapies for diseases previously considered incurable.

Our commercial efforts in regenerative medicine include the development and sale of products designed for research applications in the near term as well as products designed for diagnostic and therapeutic applications in the medium and long term. We offer advanced human stem cell products and technology that can be used by researchers at universities and at companies in the bioscience and biopharmaceutical industries. We have developed research and clinical grade hES cell lines that we market for both basic research and therapeutic product development. Our subsidiary, ES Cell International Pte Ltd ("ESI"), has developed six hES cell lines that are among the best characterized and documented cell lines available today. Developed using current Good Manufacturing Practices ("cGMP") that facilitate transition into clinical use, these hES cell lines are extensively characterized and five of the six cell lines currently have documented and publicly-available genomic sequences. The ESI hES cell lines are now included in the Stem Cell Registry of the National Institutes of Health ("NIH"), making them eligible for use in federally funded research, and all are available for purchase through http://bioreagents.lifemapsc.com. We also market human embryonic progenitor cell ("hEPCs"), which are called PureStem™ cell lines and were developed using ACTCellerate™ technology. These hEPCs are purified lineages of cells that are intermediate in the developmental process between embryonic stem cells and fully differentiated cells. We expect that hEPCs will simplify the scalable manufacture of highly purified and identified cell types and will possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapies. The PureStem™ cell lines are also available for purchase through http://bioreagents.lifemapsc.com.

Research products can be marketed without regulatory or other governmental approval, and thus offer relatively near-term business opportunities, especially when compared to therapeutic products. The medical devices and diagnostics that we and our subsidiaries are developing will require regulatory approval for marketing, but the clinical trial and approval process for medical devices is often faster and less expensive than the process for the approval of new drugs and biological therapeutics. Our current and near-term product opportunities, combined with expected long-term revenues from the potentially very large revenue that could be derived from cell-based therapeutic products under development at our subsidiaries, provide us with a balanced commercial strategy. The value of this balance is apparent in the commercial field of regenerative medicine as competitors whose sole focus is on long-term therapeutic products have found it challenging to raise the requisite capital to fund clinical development.

Our HyStem® hydrogel product line is one of the components in our near-term revenue strategy. HyStem® is a patented biomaterial that mimics the human extracellular matrix, which is the network of molecules surrounding cells in organs and tissues that is essential to cellular function. Many tissue engineering and regenerative cell-based therapies will require the delivery of therapeutic cells in a matrix or scaffold to sustain cell survival after transplantation and to maintain proper cellular function. HyStem® is a unique hydrogel that has been shown to support cellular attachment and proliferation in vivo.

Renevia™ (formerly known as HyStem®-Rx) is a clinical grade formulation of HyStem-C®, a biocompatible, implantable hyaluronan and collagen-based matrix for cell delivery in human clinical applications. As an injectable product, Renevia™ may address an immediate need in cosmetic and reconstructive surgeries and other procedures by improving the process of transplanting adipose derived cells, mesenchymal stem cells, or other adult stem cells. We will need to obtain approval by the U.S. Food and Drug Administration ("FDA") and comparable regulatory agencies in foreign countries in order to market Renevia™ as a medical device. We expect to initiate clinical trials in the European Union during the first half of 2013 for CE marking.

Other HyStem® products are currently being used by researchers at a number of leading medical schools in pre-clinical studies of stem cell therapies to facilitate wound healing, for the treatment of ischemic stroke, brain cancer, and vocal fold scarring, and for myocardial infarct repair. Our HyStem® hydrogels may have other applications when combined with the diverse and scalable cell types our scientists have isolated from hES cells.

Our subsidiary, OncoCyte Corporation, is developing PanC-Dx™, a novel non-invasive blood-based cancer screening test designed to detect the presence of various human cancers, including cancers of the breast, lung, bladder, uterus, stomach, and colon, during routine check -ups. We intend to initially seek regulatory approval to market PanC-Dx™ in Europe as a screen for breast cancer before seeking regulatory approvals required to market the product in the U.S. and other countries.

Our subsidiary, LifeMap Sciences, markets GeneCards®, the leading human gene database, as part of an integrated database suite that includes LifeMap Discovery™, the database of embryonic development, stem cell research and regenerative medicine; and MalaCards, the human disease database. LifeMap Sciences also markets PanDaTox, a database that can be used to identify genes and intergenic regions that are unclonable in E. coli, to aid in the discovery of new antibiotics and biotechnologically beneficial functional genes. LifeMap Sciences will utilize its databases as part of its online marketing strategy for our research products to reach life sciences researchers at biotech and pharmaceutical companies and at academic institutions and research hospitals worldwide.

LifeMap Sciences is also the internet sales and marketing arm of our research products for sale through the website http://bioreagents.lifemapsc.com. We now offer 12 PureStem™ hEPC lines and five hES cell lines developed under cGMP by our subsidiary ESI for sale, and hES cell lines carrying inherited genetic diseases. The hES cell lines developed by ESI are included in the NIH Stem Cell Registry, making them eligible for use in federally funded research, and five of the six cell lines currently have documented and publicly-available genomic sequences. We anticipate adding additional cell lines and related ESpan™ growth media and differentiation kits over time.

During January 2013, we entered into an Asset Contribution Agreement with our subsidiary Asterias Biotherapeutics, Inc. (“Asterias”), formerly known as BioTime Acquisition Corporation, and Geron Corporation pursuant to which Asterias will acquire a significant portfolio of patents and patent applications, cell lines, hES technology and know-how, and other assets related to potential therapeutic products in various stages of development. Two of the products under development that Asterias will acquire from Geron have already been used in early stage clinical trials involving a small number of patients. The completion of the transaction is subject to the satisfaction of certain conditions. See “Business Strategy—Asterias and the Asset Contribution—Closing Conditions.”

The products that Geron had under development from various cell types that Asterias will acquire from Geron are summarized in the following table:

Product Description	Target Market	Estimated Number of Potential Patients	Status
OPC1 – Glial Cells	Spinal Cord Injury Multiple Sclerosis, Canavan's Disease, and Stroke	25,000 patients	SCI Phase 1 Trial initiated in U.S. 5 Patients treated – no adverse events to-date Proof of principle achieved in animals models of spinal cord injury, MS spine and Canavan's Disease
CM-1 Cardiomyocytes	Heart Failure, Myocardial Infarction		Cells derived and fully characterized. Proof of concept in three animal models of disease. Scalable manufacturing established. First in man clinical trial designed.
IC-1 – Islet Cells	Type 1 and some Type 2 Diabetes	12.5 million patients	Cells derived and partly characterized. Proof of concept in rodent diabetes model. Scalable manufacturing methods under development.
CHND-1 – Chondrocytes	Osteoarthritis	30 million patients	Cells derived and partly characterized. Early proof of concept in two animal models of disease.
VAC-2 – Dendritic Cells	Cancer Infectious and Autoimmune Diseases Cancer	Large patient population	Cells derived and fully characterized. Scalable manufacturing methods under development. Proof of concept established in multiple human in vitro systems.

VAC-1 Autologous Monocyte – Derived Dendritic Cells	Prostate: 240,000 cases/year U.S.	Phase I study in metastatic prostate cancer completed. (J. of Immunology 2005, 174: 3798-3807)
	AML: >12,000 cases/year U.S.	Phase I/II study in acute myelogenous leukemia (AML) completed. Manuscript in preparation.

Asterias has not yet determined which products it will seek to develop or the order of priority in which it will commence its product development efforts after the closing of the asset acquisition transaction under the Asset Contribution Agreement (the "Asset Contribution"). The choice and prioritization of products for development from the acquired assets, and the cost and developmental time required to develop any of them, are not presently determinable due to many factors including the following:

- the functional state of the transferred cells, cell lines and other biological reagents cannot be determined until they are transferred to Asterias upon completion of the Asset Contribution and are then tested in an appropriate laboratory setting by qualified scientific personnel using validated equipment, which may not be completed for three to six months after the Asset Contribution;

- Asterias will need to complete an analysis of third party competitive and alternative technology that, for example, may provide superior methods of manufacturing the cell types listed above. Alternative technology, if it exists, may or may not be available for in-licensing, and could potentially affect the choice of products to develop;

- Asterias and BioTime will need to complete an analysis of products and technologies being developed by BioTime and our other subsidiaries to determine whether any of those products or technologies may enhance or be substituted for any of the acquired Geron cell lines or technologies;

    - the inherent uncertainty of laboratory research and any clinical trials that Asterias may conduct;

- the amount of capital that Asterias will have for its development programs, including potential sources of additional capital through research grants or collaborations with third parties;

- the availability and recruitment of qualified personnel to carry out the analyses and evaluations described above;

- the views of the FDA and comparable foreign regulatory agencies on the pre-clinical product characterization studies required to file an Investigational New Drug Application (IND) in order to initiate human clinical testing of potential therapeutic products.

Asterias may also use the acquired assets, along with technology that it may develop itself or that it may acquire from third parties to pursue the development of other products. Asterias's product development efforts may be conducted by Asterias alone or in collaboration with others if suitable co-development arrangements can be made.

Plasma Volume Expander Products

We have developed and licensed manufacturing and marketing rights to Hextend®, a physiologically balanced blood plasma volume expander used for the treatment of hypovolemia in surgery, emergency trauma treatment, and other applications. 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 or when a patient has sustained substantial blood loss due to an injury. Hextend® 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. ("CJ"), under license from us.

Business Strategy

One of our goals is to develop cell-based regenerative therapies for age-related degenerative disease. The degenerative diseases of aging meet several criteria that make them an attractive business opportunity. First, the elderly comprise a large and growing segment of the U.S. and world population. Second, chronic degenerative diseases account for nearly 75% of health care costs. Third, 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, our cell replacement technologies may eliminate the high costs associated with years of palliative care addressing these large markets.

Our effort in regenerative medicine also includes research on more than 200 purified, scalable, and novel human embryonic progenitor cell types produced from hES and iPS 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. This novel manufacturing technology may provide us with a competitive advantage in producing highly purified, identified, and scalable cell types for potential use in therapy.

We have organized several subsidiaries to undertake our cell replacement therapeutic programs, diagnostic product programs, and our research product 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.

The following table shows our subsidiaries, their respective principal fields of business, our percentage ownership as of April 19, 2013, and the country where their principal business is located:

Subsidiary	Field of Business	BioTime Ownership	Country
ES Cell International Pte. Ltd.	Stem cell products for research, including clinical grade cell lines produced under cGMP	100%	Singapore
OncoCyte Corporation	Diagnosis and treatment of cancer	75.3%	USA
OrthoCyte Corporation	Orthopedic diseases, including osteoarthritis	100%	USA
Cell Cure Neurosciences, Ltd.	Age-related macular degeneration Multiple sclerosis Parkinson's disease	62.6%	Israel
ReCyte Therapeutics, Inc. (formerly Embryome Sciences, Inc.)	Vascular disorders, including cardiovascular-related diseases, vascular injuries, and acquired lymphedema Endothelial progenitor cells for research and drug testing; iPS cell banking	95.15%	USA
BioTime Asia, Limited	Ophthalmologic, skin, musculo-skeletal system, and hematologic diseases for Asian markets. Stem cell products for research	81%	Hong Kong
LifeMap Sciences, Inc.	Genetic, disease, and stem cell databases; sale of stem cell products for research	73.2%	USA
LifeMap Sciences, Ltd.	Stem cell database	(1)	Israel
Asterias Biotherapeutics, Inc.	Research, development and commercialization of human therapeutic products from stem cells	96.7%(2)	USA

(1) LifeMap Sciences, Ltd. is a wholly-owned subsidiary of LifeMap Sciences, Inc.

(2) We expect our percentage ownership will be reduced to approximately 71.6% after Asterias issues common stock and warrants to us and issues common stock to Geron pursuant to the Asset Contribution Agreement, and sells common stock and warrants to an investor for cash in a related transaction, but prior to any future exercise of the warrants issued to us and to the investor.

The joint ownership of subsidiaries with other investors will allow us to fund the expensive development costs of therapeutics in a manner that spreads the costs and risk and reduces our need to obtain more equity financing of our own that could be dilutive to our shareholders. In some cases, the co-investors in our subsidiaries may include other participants in the pharmaceutical or biotechnology industry and their affiliates. An example of this would be our investment in Cell Cure Neurosciences, which was made in concert with investments from Teva Pharmaceutical Industries, Ltd. and HBL-Hadasit Bio-Holdings, Ltd.

Another tenet of our business strategy is 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 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, and realize greater revenues than would be possible with the development of therapeutic products

alone.

We have made the filing and prosecution of patent applications an integral part of our business strategy in order to protect our investment in our products and that we and our subsidiaries have developed or licensed from others.

Asterias and the Asset Contribution

During September 2012, we formed Asterias to acquire assets in the stem cell field for use in developing and commercializing products for regenerative medicine. During January 2013, Asterias entered into the Asset Contribution Agreement to acquire assets that Geron had used in its stem cell research and development programs. We believe that the Asset Contribution transaction will be a good strategic fit and presents a unique opportunity to enhance and expand the intellectual property estate of the BioTime family of companies and to position us for future growth in the regenerative medicine field. In evaluating the opportunity for Asterias to acquire Geron's stem cell assets, we considered a number of potentially positive factors, including the following, which are not intended to be exhaustive and are not in any relative order of importance:

- the acquisition a significant intellectual property estate consisting of Geron's human hES patent portfolio of over 400 patents and patent applications that will be transferred or sublicensed to Asterias;

- the complementary nature of our and Geron's assets in the hES cell field, giving Asterias multiple potential opportunities to advance products derived from hES cells;

- the potential to leverage the combined technology expertise of BioTime and Asterias to provide enhanced research and development activities;

- the potential expansion of a clinical product pipeline through Asterias's acquisition of OPC-1 cells previously in a Phase I clinical trial of hES cell-derived oligodendrocytes in patients with acute spinal cord injury, and a Phase II trial treating cancer with a dendritic cell therapeutic vaccine targeting telomerase; and

- synergies associated with our and Geron's stem cell assets, merging foundational technologies and allowing Asterias to build upon the pluripotent stem cell technology platform.

By acquiring Geron's stem cell assets, Asterias will have the use of cell lines and other biological materials, patents, and technology developed by Geron over 12 years of work focused in the following complementary lines of research:

- The establishment of cell banks of undifferentiated hES cells produced under current good manufacturing procedures "cGMP" and suitable for human therapeutic use;

- The development of scalable differentiation methods which convert, at low cost, undifferentiated hES cells into functional cells suitable for human therapeutic cells that can be stored and distributed in the frozen state for "off-the-shelf" use;

- The development of regulatory paradigms to satisfy both U.S. and European regulatory authority requirements to begin human clinical testing of products made from hES cells; and

    - The continuous filing and prosecution of patents covering inventions to protect commercialization rights, as well as consummating in-licenses to enable freedom to operate in a variety of fields.

Under the Asset Contribution Agreement, Asterias will receive the following assets from Geron and us in exchange for Asterias securities and the assumption of certain liabilities:

From Geron:

- certain patents and patent applications and all related active prosecution cases, trade secrets, know-how and certain other intellectual property rights, and all of Geron's goodwill with respect to the technology of Geron directly related to the research, development and commercialization of certain products and know-how related to hES cells;

- certain biological materials and reagents (including master and working cell banks, original and seed banks, and research, pilot and GMP grade lots and finished product);

- certain laboratory equipment;

- certain contracts;

- certain books, records, lab notebooks, clinical trial documentation, files and data;

- certain regulatory filings for clinical trials for GRNOPC-1 for spinal cord injury, including the investigational new drug applications filed with the United States FDA for Geron's Phase I safety study of oligodendrocyte progenitor (GRNOPC-1) cells in patients with neurologically complete, subacute spinal cord injury (Protocol No. CP35A007), and long term follow up of subjects who received GRNOPC1 (Protocol No. CP35A008), and the clinical trials for VAC1 for acute myelogenous leukemia, including a Phase I/II study of active immunotherapy with GRNVAC1, autologous mature dendritic cells transfected with mRNA encoding human telomerase reverse transcriptase (hTERT), in patients with acute myelogenous leukemia (AML) in complete remission (Protocol No. CP06-151) (the "Clinical Trials"); and

- certain abandoned or inactive patents and abandoned or inactive patent applications.

We refer to the assets to be contributed to Asterias by Geron as the "Contributed Geron Assets." In addition, Asterias will receive from Geron an exclusive sublicense of certain patents owned by the University of Colorado; University License Equity Holdings, Inc. relating to telomerase (the "Telomerase Sublicense"). The Telomerase Sublicense will entitle Asterias to use the sublicensed patents in the development of certain immunological treatments for cancer. Under the Telomerase Sublicense, Asterias will pay Geron an up-front license fee, a small annual license maintenance fee, and a small royalty on sales of any products that Asterias may develop and commercialize using the sublicensed patents.

From Us:

- 8,902,077 BioTime common shares, which we refer to as the Contribution Shares, which for purposes of the Asset Contribution Agreement were valued at $30,000,000, or $3.37 per share, based upon the aggregate volume weighted-average per share closing price of our common shares as listed on the NYSE MKT for the twenty (20) consecutive trading days immediately preceding January 4, 2013 (the "Average Price");

- The warrants to purchase 8,000,000 additional BioTime common shares, exercisable for a period of five years at a price of $5.00 per share, subject to adjustment for certain transactions, which we refer to as the "Contribution Warrants";

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- $5,000,000 in cash, which we refer to as the "BioTime Cash Contribution";

- 10% of the shares of common stock of our subsidiary OrthoCyte Corporation issued and outstanding as of January 4, 2013;

- 6% of the ordinary shares of our subsidiary Cell Cure Neurosciences, Ltd. issued and outstanding as of January 4, 2013; and

- a quantity of five hES cell lines produced by our subsidiary ESI under "good manufacturing practices" sufficient to generate master cell banks, and non-exclusive, world-wide, royalty-free licenses to use those cell lines and certain patents pertaining to stem cell differentiation technology for any and all purposes.

Cash Contribution to Asterias by Private Investor

In connection with the Asset Contribution, Asterias has also entered into a Stock and Warrant Purchase Agreement with Romulus Films, Ltd. ("Romulus") pursuant to which Romulus has agreed to contribute $5,000,000 in cash to Asterias for 2,136,000 shares of Asterias Series B common stock, par value $0.0001 per share ("Asterias Series B Shares") and warrants to purchase 350,000 additional Series B Shares. That investment will be made in conjunction with the closing of the Asset Contribution.

If for any reason Romulus fails to make all or any portion of that $5,000,000 contribution, we will contribute to Asterias additional cash, BioTime common shares, or a combination of cash and BioTime common shares in an amount equal in value to the cash not contributed by Romulus. Any BioTime common shares so contributed will be valued at the Average Price of $3.37 per share, and we will receive the Asterias Series B Shares and Asterias warrants that Romulus would otherwise have received had it made the cash contribution to Asterias.

Assumed Liabilities

At the closing of the Asset Contribution, Asterias will assume all obligations and liabilities of Geron and its affiliates relating to:

- the Contributed Geron Assets and attributable to periods, events or circumstances after the Asset Contribution;

- obligations of Geron and its affiliates to be performed following the Asset Contribution, under contracts included in the Contributed Geron Assets;

- an appeal filed in the United States District Court in Civil Action No. C12-04813 (the "ViaCyte Appeal") seeking the reversal of two adverse determinations by the United States Patent and Trademark Office's Board of Patent Appeals and Interferences with respect to two patent applications in U.S. Patent Interference 105,734, involving US patent 7,510,876 (ViaCyte) and US patent application 11/960,477 (Geron), and U.S. Patent Interference 105,827 involving US patent 7,510,876 (ViaCyte) and US patent application 12/543,875 (Geron). Asterias will also assume the patent interferences upon which the ViaCyte Appeal is based, as well as certain oppositions filed by Geron against certain ViaCyte, Inc. patent filings in Australia and in the European Patent Office; provided, that Asterias will not assume expenses incurred by Geron relating to the appeal or the other ViaCyte patent interference and opposition proceedings prior to the closing of the Asset Contribution; and

- the Clinical Trials.

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Ownership of Asterias following the Asset Contribution

At the closing of the Asset Contribution, Asterias will issue to Geron, BioTime and Romulus the following Asterias securities:

- To Geron, 6,537,779 shares of Asterias Series A common stock, par value $0.0001 per share ("Asterias Series A Shares");
- To BioTime, 21,773,340 Asterias Series B Shares, and warrants to purchase 3,150,000 Asterias Series B Shares, exercisable for a period of three years from the date of issue at an exercise price of $5.00 per share; and
- To Romulus, 2,136,000 Asterias Series B Shares, and warrants to purchase 350,000 additional Asterias Series B Shares exercisable for a period of three years from the date of issue at an exercise price of $5.00 per share.

Closing Conditions

Closing of the Asset Contribution is subject to certain negotiated conditions, including: the effectiveness of certain registration statements that have been filed by us and by Asterias under the Securities Act to register the securities that we and Asterias propose to issue under the Asset Contribution Agreement; the effectiveness of an insurance policy to provide $10 million in coverage for certain of our indemnification obligations to Geron for a period of five years, and the approval by our shareholders of the issuance of the BioTime shares and Contribution Warrants in the transaction and the amendment of our Articles of Incorporation to increase our authorized capital stock from 75,000,000 common shares and 1,000,000 preferred shares to 125,000,000 common shares and 2,000,000 preferred shares.

Royalty Agreement

At the closing of the Asset Contribution, Asterias will enter into a Royalty Agreement with Geron pursuant to which Asterias will agree to pay Geron a 4% royalty on net sales (as defined in the Royalty Agreement), by Asterias or any affiliate or sales agent of Asterias, of any products that are developed and commercialized in reliance upon the patents contributed by Geron to Asterias. In the case of sales of such products by a person other than Asterias or an affiliate or sales agent of Asterias, Asterias will be required to pay Geron 50% of all royalties and cash payments received by Asterias or its affiliate in respect of a product sale.

Cash Investment in BioTime by Private Investor

In order to fund the BioTime Cash Contribution in the Asset Contribution, we entered into a Stock and Warrant Purchase Agreement with Romulus (the "Romulus Agreement") under which Romulus has purchased for $5,000,000 in cash 1,350,000 common shares and Investor Warrants to purchase approximately 650,000 additional common shares (the "Investor Warrants"). We agreed to register for sale under the Securities Act the common shares and Investor Warrants issued to Romulus, and the common shares issuable upon the exercise of the Investor Warrants, and those common shares and Investor Warrants are included in this prospectus.

Prior to the closing of the Asset Contribution, we may lend to Asterias some or all of the funds that we received from Romulus under the Romulus Agreement. Amounts loaned by us to Asterias, up to $5,000,000 in the aggregate, will be credited towards the BioTime Cash Contribution upon the closing of the Asset Contribution, upon the cancellation of such indebtedness.

The Series A Distribution

In the Asset Contribution Agreement, Geron has agreed to distribute to its stockholders, on a pro rata basis, the Asterias Series A Shares it receives from Asterias in the Asset Contribution (the "Series A Distribution"). Geron is required to make the Series A Distribution as soon as practicable following the closing of the Asset Contribution, subject to applicable legal requirements and certain other limitations. In lieu of distributing the Asterias Series A Shares in certain to-be-determined excluded jurisdictions, Geron will sell the Asterias Series A Shares that its stockholders who reside in those jurisdictions would otherwise receive and Geron will distribute the cash proceeds to those stockholders on a pro rata basis.

The Contribution Warrants Distribution

Following that Series A Distribution by Geron, Asterias will distribute to the holders of Asterias Series A Shares, on a pro rata basis, the 8,000,000 Contribution Warrants that it will receive from us in the Asset Contribution. As a result of the Contribution Warrants Distribution, Asterias will not derive any future economic value from the Contribution Warrants and instead the value of the Contribution Warrants will benefit the holders of Asterias Series A Shares who receive the Contribution Warrants.

Additional Information

HyStem®, Hextend® and PentaLyte® are registered trademarks of BioTime, Inc., and Renevia™, PureStem™, ESpan™, and ESpy™ are trademarks of BioTime, Inc. ACTCellerate™ is a trademark licensed to us by Advanced Cell Technology, Inc. ReCyte™ is a trademark of ReCyte Therapeutics, Inc. PanC-Dx™ is a trademark of OncoCyte Corporation. GeneCards® is a registered trademark of Yeda Research and Development Co. Ltd.

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.

Offering Summary

Common Shares Offered	1,423,553 outstanding BioTime common shares and 649,998 common shares issuable upon the exercise of the Investor Warrants are being offered by the selling security holders.
	172,533 outstanding BioTime common shares are being offered by our subsidiary LifeMap Sciences.
	1,286,174 outstanding BioTime common shares are being offered by our subsidiary OncoCyte.
Warrants Offered	649,998 Investor Warrants are being offered by Romulus as one of the selling security holders.
Common Shares Outstanding	54,912,793 shares as of March 28, 2013, which does not include 810,000 shares issued to Romulus under the Romulus Agreement after that date.

How to Exercise Investor Warrants

- The Investor 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 Investor Warrants must be made in by personal check or bank cashier's check or by wire transfer.

Other Terms of Investor Warrants: Each Investor Warrant entitles the holder to purchase one common share at a price of $5.00 per share. The Investor Warrants will expire on January 13, 2016 and may not be exercised after that date. The number of shares issuable upon the exercise of the Investor Warrants and the exercise price per share will be proportionally adjusted in the event of a stock split, stock dividend, combination, or recapitalization of the common shares, or as a result of certain other transactions. See "DESCRIPTION OF SECURITIES—Warrants."

RISK FACTORS

Our business is subject to various risks, including those described below. You should consider the following risk factors, together with all of the other information included in this report, which could materially adversely affect our proposed operations, our business prospects, and financial condition, and the value of an investment in our business. There may be other factors that are not mentioned here or of which we are not presently aware that could also affect our business operations and prospects.

Risks Related to Our Business Operations

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

Our comprehensive net losses for the fiscal years ended December 31, 2012, 2011, and 2010 were $21,362,524, $17,535,587, and $10,287,280, respectively, and we had an accumulated deficit of $101,895,712, $80,470,009, and $63,954,509, as of December 31, 2012, 2011, and 2010, 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. More recently, we have financed a portion of our operations with research grants and subscription fees for the database products marketed by our subsidiary LifeMap Sciences. 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.

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- The experimentation we are doing is costly, time consuming, and uncertain as to its results. We incurred research and development expenses amounting to $18,116,688, $13,699,691, and $8,191,314 during the fiscal years ended December 31, 2012, 2011, and 2010, 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, particularly those products that are regulated as drugs or biological, 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.

Completion of the Asset Contribution will result in an increase in our operating expenses and losses on a consolidated basis

- Asterias will use the stem cell assets that it will acquire from Geron for the research and development of products for regenerative medicine. Asterias's research and development efforts will involve substantial expense, including but not limited to hiring additional research and management personnel, and the rent of a new office and research facility, that will add to our losses on a consolidated basis for the near future.

- Asterias will become a public company in connection with the completion of the Asset Contribution and the Series A Distribution. As a public company, Asterias will incur costs associated with audits of its financial statements, filing annual, quarterly, and other periodic reports with the SEC, holding annual shareholder meetings, listing its common shares for trading, and public relations and investor relations. These costs will be in addition to those incurred by BioTime for similar purposes.

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 bans or 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.

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 the products we may develop will be adversely impacted by the availability of competing products

- Sales of Hextend® have already been adversely impacted by the availability of other products that 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 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®. Hospira also markets Voluven®, a plasma volume expander containing a 6% low molecular weight hydroxyethyl starch in saline solution.

- Competing products for the diagnosis and treatment of cancer are being manufactured and marketed by established pharmaceutical companies, and more cancer diagnostics and therapeutics are being developed by those companies and by other smaller biotechnology companies. Other companies, both large and small, are also working on the development of stem cell based therapies for the same diseases and disorders that are the focus of the research and development programs of our subsidiaries

- 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 December 31, 2012, we had $4,349,967 of cash and cash equivalents on hand. Although we have raised an additional $13,431,430 of equity capital during 2013, 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 may have to postpone some 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. Asterias's stem cell research program will be directed primarily by its Chief Executive Officer Dr. Thomas Okarma, and by its President of Research and Development, Dr. Jane Lebkowski. The loss of the services of Dr. West, Dr. Okarma, or Dr. Lebkowski could have a material adverse effect on us.

If we make strategic acquisitions, we will incur a variety of costs and might never realize the anticipated benefits

Our experience in independently identifying acquisition candidates and integrating their operations with ours is limited to our acquisitions of ESI in 2010, Glycosan Biosystems, Inc. and Cell Targeting, Inc. in 2011, and XenneX, Inc. in 2012. During January 2013, we entered into the Asset Contribution Agreement for our subsidiary Asterias to acquire stem cell related assets from Geron. If appropriate opportunities become available, we might attempt to acquire approved products, additional drug candidates, technologies or businesses that we believe are a strategic fit with our business. If we pursue any transaction of that sort, the process of negotiating the acquisition and integrating an acquired product, drug candidate, technology or business might result in operating difficulties and expenditures and might require significant management attention that would otherwise be available for ongoing development of our business, whether or not any such transaction is ever consummated. Moreover, we might never realize the anticipated benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities, or impairment expenses related to goodwill, and impairment or amortization expenses related to other intangible assets, which could harm our financial condition.

Failure of our internal control over financial reporting could harm our business and financial results

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with accounting principles generally accepted in the U.S. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our financial statements; providing reasonable assurance that receipts and expenditures of our assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. Our growth and entry into new products, technologies and markets will place significant additional pressure on our system of internal control over financial reporting. Any failure to maintain an effective system of internal control over financial reporting could limit our ability to report our financial results accurately and timely or to detect and prevent fraud.

Operating our business through subsidiaries, some of which are located in foreign countries, also adds to the complexity of our internal control over financial reporting and adds to the risk of a system failure, an undetected improper use or expenditure of funds or other resources by a subsidiary, or a failure to properly report a transaction or financial results of a subsidiary. We allocate certain expenses among BioTime itself and one or more of our subsidiaries, which creates a risk that the allocations we make may not accurately reflect the benefit of an expenditure or use of financial or other recourses by BioTime as the parent company and the subsidiaries among which the allocations are made. An inaccurate allocation may impact our consolidated financial results, particularly in the case of subsidiaries that we do not wholly own since our financial statements include adjustments to reflect the minority ownership interests in our subsidiaries held by others.

Our business and operations could suffer in the event of system failures

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such events could cause interruption of our operations. For example, the loss of data for our product candidates could result in delays in our regulatory filings and development efforts and significantly increase our costs. To the extent that any disruption or security breach was to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed.

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 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.

- Clinical trials and the regulatory approval process for a pharmaceutical product can take several years to complete. As a result, 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.

- 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.

Clinical trial failures can occur at any stage of the testing and we may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent commercialization of our current or future drug candidates

Clinical trial failures or delays can occur at any stage of the trials, and may be directly or indirectly caused by a variety of factors, including but not limited to:

- delays in securing clinical investigators or trial sites for our clinical trials;

- delays in obtaining Independent Review Board (“IRB”) and other regulatory approvals to commence a clinical trial;

- slower than anticipated rates of patient recruitment and enrollment, or failing to reach the targeted number of patients due to competition for patients from other trials,

- limited or no availability of coverage, reimbursement and adequate payment from health maintenance organizations and other third party payors for the use of agents used in our clinical trials;

- negative or inconclusive results from clinical trials;

- unforeseen side effects interrupting, delaying or halting clinical trials of our drug candidates, and possibly resulting in the FDA or other regulatory authorities denying approval of our drug candidates;

- unforeseen safety issues;

- uncertain dosing issues;

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- approval and introduction of new therapies or changes in standards of practice or regulatory guidance that render our clinical trial endpoints or the targeting of our proposed indications obsolete;

- inability to monitor patients adequately during or after treatment or problems with investigator or patient compliance with the trial protocols;

- inability to replicate in large controlled studies safety and efficacy data obtained from a limited number of patients in uncontrolled trials;

- inability or unwillingness of medical investigators to follow our clinical protocols; and unavailability of clinical trial supplies.

Government-imposed bans or 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 bans or restrictions on the use of embryos or hES cells in research and development 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 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.

- 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 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 recent Supreme Court decision in Mayo Collaborative Services v. Prometheus Laboratories, Inc., will need to be considered in determining whether certain diagnostic methods can be patented, since the Court denied patent protection for the use of a mathematical correlation of the presence of a well-known naturally occurring metabolite as a means of determining proper drug dosage. Our subsidiary, OncoCyte, is developing PanC-Dx™ as a cancer diagnostic test, based on the presence of certain genetic markers for a variety of cancers. Because PanC-Dx™ combines an innovative methodology with newly discovered compositions of matter, we are hopeful that this Supreme Court decision will not preclude the availability of patent protection for OncoCyte's new product. However, like other developers of diagnostic products, we are evaluating this new Supreme Court decision and new interim guidelines implemented by the United States Patent and Trademark Office for the patenting of products that test for biological substances.

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 Office ("PTO") for patents or applications filed before March 16, 2013 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 may 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.

- After March 16, 2013, a derivation proceeding may be instituted by the PTO or an inventor alleging that a patent or application was derived from the work of another inventor.

- Post Grant Review under the new America Invents Act will make available after March 16, 2013 opposition-like proceedings in the United States. As with the PTO interference proceedings, Post Grant Review proceedings will be very expensive to contest and can result in significant delays in obtaining patent protection or can result in a denial of a patent application.

    - Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. As with the 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, stem cell products, HyStem® and other hydrogels, certain genes related to the development of cancer, and other technologies.

- 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 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. Our patents may be subject to inter partes review (replacing the reexamination proceeding), a proceeding in which a third party can challenge the validity of one of our patents.

We may be subject to patent infringement claims that could be costly to defend, which could limit our ability to use disputed technologies, and which could prevent us from pursuing research and development or commercialization of some of our products, require us to pay licensing fees to have freedom to operate and/or result in monetary damages or other liability for us

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.

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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 Related to our Dependence on Third Parties

We may become dependent on possible future collaborations to develop and commercialize many of our product candidates and to provide the regulatory compliance, sales, marketing and distribution capabilities required for the success of our business.

We may enter into various kinds of collaborative research and development and product marketing agreements to develop and commercialize our products. The expected future milestone payments and cost reimbursements from collaboration agreements could provide an important source of financing for our research and development programs, thereby facilitating the application of our technology to the development and commercialization of our products, but there are risks associated with entering into collaboration arrangements.

There is a risk that we could become dependent upon one or more collaborative arrangements for product development or as a source of revenues from the sale of any products that may be developed by us alone or through one of the collaborative arrangements. A collaborative arrangement upon which we might depend might be terminated by our collaboration partner or they might determine not to actively pursue the development or commercialization of our products. A collaboration partner also may not be precluded from independently pursuing competing products and drug delivery approaches or technologies.

There is a risk that a collaboration partner might fail to perform its obligations under the collaborative arrangements or may be slow in performing its obligations. In addition, a collaboration partner may experience financial difficulties at any time that could prevent it from having available funds to contribute to the collaboration. If a collaboration partner fails to conduct its product development, commercialization, regulatory compliance, sales and marketing or distribution activities successfully and in a timely manner, or if it terminates or materially modifies its agreements

with us, the development and commercialization of one or more product candidates could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue such development and commercialization on our own.

We have very limited experience in marketing, selling or distributing our products, and we may need to rely on marketing partners or contract sales companies.

- Even if we are able to develop our products and obtain necessary regulatory approvals, we have very limited experience or capabilities in marketing, selling or distributing our products. We rely entirely on Hospira and CJ for the sale of Hextend®.

- We currently have only limited sales, marketing and distribution resources for selling our stem cell research products, and no marketing or distribution resources for selling any of the medical devices or pharmaceutical products that we are developing. Accordingly, we will be dependent on our ability to build our own marketing and distribution capability for our new products, which would require the investment of significant financial and management resources, or we will need to find collaborative marketing partners or independent sales representatives, or wholesale distributors for the commercial sale of our products.

- If we market products through arrangements with third parties, we may pay sales commissions to sales representatives or we may sell or consign products to distributors at wholesale prices. As a result, our gross profit from product sales may be lower than it would be if we were to sell our products directly to end users at retail prices through our own sales force.

- There can be no assurance we will be able to negotiate distribution or sales agreements with third parties on favorable terms to justify our investment in our products or achieve sufficient revenues to support our operations.

We do not have the ability to independently conduct clinical trials required to obtain regulatory approvals for our drug candidates.

We will need to rely on third parties, such as contract research organizations, data management companies, contract clinical research associates, medical institutions, clinical investigators and contract laboratories to conduct any clinical trials that we may undertake for our products. We may also rely on third parties to assist with our preclinical development of drug candidates. If we outsource clinical trial we may be unable to directly control the timing, conduct and expense of our clinical trials. If we enlist third parties to conduct clinical trials and they fail to successfully carry out their contractual duties or regulatory obligations or fail to meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our preclinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our drug candidates.

Risks Related to the Asset Contribution Agreement

Asterias will assume Geron's appeal of two adverse patent rulings, and if the appeal is not successful, Asterias may not realize value from the Geron patent applications at issue in the appeal and might be precluded from developing therapies to treat certain diseases, such as diabetes.

At the closing of the asset contribution transaction under the Asset Contribution Agreement, Asterias will be substituted for Geron as a party in interest in an appeal filed by Geron in the United States District Court for the Northern District of California, appealing two adverse rulings in favor of ViaCyte, Inc. (formerly Novocell Inc.) by the United States Patent and Trademark Office's Board of Patent Appeals and Interferences. These rulings related to interference proceedings involving patent filings relating to definitive endoderm cells. Geron had requested that the Board of Patent Appeals and Interferences declare this interference after ViaCyte was granted patent claims that conflicted with subject matter Geron filed in a patent application having an earlier priority date. Those Geron patent applications are among the patent assets that Geron will contribute to Asterias. Asterias will assume all liabilities arising with respect to the ViaCyte Appeal, other than expenses incurred by Geron relating to the ViaCyte Appeal prior to the closing of the asset contribution transaction. Appeals of this nature may involve costly and time-consuming legal proceedings and if Asterias is not successful in the appeal, these rulings may prevent or limit development of Asterias product candidates in certain fields such as diabetes treatment and Asterias may be unable to realize value from the patent applications at issue in the appeal.

We could be liable to indemnify Geron for certain liabilities and must also bear the cost of an insurance policy for the benefit of Geron.

We and Asterias have agreed to indemnify Geron from and against certain liabilities relating to (a) the Series A Distribution, (b) Asterias's distribution of the Contribution Warrants to the holders of Asterias Series A Shares and (c) any distribution of securities by Asterias to the holders of the Asterias Series A Shares within one year following the closing under the Asset Contribution Agreement. That indemnification obligation will last through the fifth anniversary of the earliest to occur of the date on which all of the Contribution Warrants have either expired, or been exercised, cancelled or sold. We have also agreed to use our reasonable best efforts to obtain at our cost and expense prior to the closing under the Asset Contribution Agreement a policy of insurance to provide $10,000,000 of coverage for those indemnification obligations for a period of five years. The cost of obtaining and maintaining the insurance policy in place for five years could be significant, and the insurance would be for the benefit of Geron and its affiliates.

We and Asterias have also agreed to indemnify Geron, from and against certain expenses, losses, and liabilities arising from, among other things, breaches of our or Asterias's representations, warranties and covenants under the Asset Contribution Agreement. The maximum damages that may be recovered by either party for a loss under this indemnification related to representations, warranties and pre-closing covenants, with certain exceptions, is limited to $2 million.

Completing the Asset Contribution may divert our management's attention away from ongoing operations and could adversely affect ongoing operations and business relationships.

Completing the Asset Contribution will require a significant amount of time and attention from our management. Moreover, after the Asset Contribution, our management will be required to provide more management attention to Asterias. The diversion of our management's attention away from our other operations could adversely affect our operations and business relationships that do not relate to Asterias.

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Risks Pertaining to Our Common Shares and Warrants

Ownership of our common shares and Investor Warrants will entail certain risks associated with the volatility of prices for our common shares and Investor Warrants and the fact that we do not pay dividends on our common shares.

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common shares outstanding prior to this offering. Assuming that an aggregate of 2,882,260 of our common shares are sold at a price of $3.79 per share, the last reported sale price of our common shares on the NYSE MKT on April 19, 2013 for aggregate gross proceeds of $10,923,765, after deducting estimated aggregate offering expenses payable by the selling security holders, you will experience immediate dilution to $3.52 per share, representing the difference between our as adjusted net tangible book value per share as of December 31, 2012 after giving effect to this offering and the assumed offering price. See the section entitled “DILUTION” below for a more detailed illustration of the dilution you would incur if you participate in this offering.

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

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

- The price of our common 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 common 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.

    - Changes in the price of our common shares will affect the value of the Investor Warrants.

There is no public market for the Investor Warrants included in this prospectus and we do not expect that a public market for the Investor Warrants will develop

We do not intend to apply to list the Investor Warrants on a national securities exchange or to arrange for the trading of the Investor Warrants in an over-the-counter market. The absence of an active public market would make it difficult for Investor Warrant holders to sell their Investor Warrants and would adversely affect the value of the Investor Warrants.

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

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 and the value of the Investor Warrants.

Because we do not pay dividends, our common shares 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 common shares may not be a suitable investment for anyone who needs to earn income from their investments.

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 common shares and the value of the Investor Warrants

The trading market for our common shares and the value of the Investor Warrants 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 and the value of the Investor Warrants. If securities analysts do cover our common shares, they could issue reports or recommendations that are unfavorable to the price of our common shares and the value of the Investor Warrants, and they could downgrade a previously favorable report or recommendation, and in either case our share price and the value of the Investor Warrants could decline as a result of the report. If one or more of these analysts does not initiate coverage, ceases to cover our common shares or fails to publish regular reports on our business, we could lose visibility in the financial markets, which could cause the market price and trading volume of our shares, and the value of the Investor Warrants, to decline.

You may experience dilution of your ownership interests because of the future issuance of additional common shares 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, and in connection with the proposed contribution of assets to Asterias under the Asset Contribution Agreement we will ask our shareholders to approve an amendment of our Articles of Incorporation increasing our authorized capital stock to 125,000,000 common shares and 2,000,000 preferred shares. As of March 28, 2013, there were 54,912,793 common shares outstanding. In addition, as of that date 4,771,301 common shares were reserved for issuance upon the exercise of outstanding options under our employee stock option plans and 1,206,611 shares were reserved for issuance upon the exercise of common share purchase warrants, including the Investor Warrants. No preferred shares are presently outstanding.

- We plan to issue a minimum of 8,902,077 common shares and a maximum of 11,463,464 common shares and 8,000,000 Contribution Warrants to Asterias under the Asset Contribution Agreement.

- 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 and the value of the Investor Warrants.

- 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.

The market price of our common shares and the value of the Investor Warrants could be impacted by the sale of the common shares included in this prospectus, including any shares that may be issued upon the exercise of the Investor Warrants, and by the sale of the common shares and issuance of the Contribution Warrants that we will issue to Asterias under the Asset Contribution Agreement

- The sale of the common shares included in this prospectus, including any shares that may be acquired through the exercise of the Investor Warrants and then sold, could create downward pressure on the trading price of our shares and the value of the Investor Warrants.

- Under the Asset Contribution Agreement, we have agreed to issue to Asterias a minimum of 8,902,077 common shares, and a maximum of 11,463,464 common shares. Asterias may sell the common shares that it receives from us. Those sales may take place from time to time on the NYSE MKT and may create downward pressure on the trading price of our common shares and the value of the Investor Warrants.

- We have also agreed to issue 8,000,000 Contribution Warrants to Asterias under the Asset Contribution Agreement. Asterias plans to distribute the Contribution Warrants to the future holders of Asterias Series A Shares.

- The Contribution Warrants will be exercisable for a period of five years at an exercise price of $5.00 per share, subject to adjustment for certain stock splits, reverse stock splits, stock dividends, recapitalizations and other transactions. The Investor Warrants will be exercisable for a period of three years at an exercise price of $5.00 per share, subject to adjustment for certain stock splits, reverse stock splits, stock dividends, recapitalizations and other transactions. During the period that the Contribution Warrants and the Investor Warrants are outstanding, the actual or potential exercise of those warrants and sale of the underlying common shares may create downward pressure on the trading price of our common shares and the value of the Investor Warrants.

The market price of our common shares and value of the Investor Warrants could be impacted by prices at which we sell shares in our subsidiaries

The operation of some our subsidiaries has been financed in part through the sale of capital stock in those subsidiaries, and our subsidiaries may sell shares of their capital stock in the future for financing purposes. The prices at which our subsidiaries may sell shares of their capital stock could impact the value of our company as a whole and could impact the price at which our common shares trade in the market and the value of the Investor Warrants. A sale of capital stock of one of our subsidiaries at a price that the market perceives as low could adversely impact the market price of our common shares and the value of the Investor Warrants. Even if our subsidiaries sell their capital stock at prices that reflect arm’s length negotiation with investors, there is no assurance that those prices will reflect a true fair market value or that the ascribed value of the subsidiaries based on those share prices will be fully reflected in the market value of our common shares and the value of the Investor Warrants.

USE OF PROCEEDS

All of the proceeds of from the sale of our common shares and Investor Warrants by the selling security holders through this prospectus will belong to the selling security holders and not to us. We will receive the exercise price of the Investor Warrants when and if the Investor Warrants are exercised. If all of the Investor Warrants are exercised, we will receive $3,249,990. We intend to use the net proceeds from the exercise of the Investor Warrants for general corporate purposes, including, without limitation, working capital, capital expenditures, research and development expenditures, regulatory affairs expenditures, and clinical trial expenditures. Our management will have broad discretion in the application of the net proceeds from the exercise of the Investor Warrants. Pending the application of the net proceeds from the exercise of the Investor Warrants, we expect to invest the proceeds in investment grade, interest bearing securities.

The net proceeds from the sale of BioTime common shares by LifeMap Sciences and OncoCyte will be used in their respective operations for general corporate purposes, including, without limitation, working capital, capital expenditures, and research and development expenditures, and in the case of OncoCyte, clinical development of PanC-Dx™. The amount of net proceeds that may become available to LifeMap Sciences and OncoCyte from time to time cannot presently be determined and will depend upon the prices at which they are able to sell their BioTime common shares. Until used, the net proceeds received by LifeMap Sciences and OncoCyte from the sale of their BioTime common shares will be invested in certificates of deposit, United States government securities, or other high quality, short-term, interest-bearing investments.

DILUTION

If you invest in our common shares, your interest will be diluted immediately to the extent of the difference between the public offering price per share and the adjusted net tangible book value per share of our common shares after this offering.

If you purchase our common shares in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common shares after this offering. We calculate net tangible book value per share by dividing our net tangible assets (tangible assets less total liabilities) by the number of our common shares issued and outstanding as of December 31, 2012.

Our net tangible book value at December 31, 2012 was $3,807,581, or $0.07 per share. After giving effect to the sale of our common shares by the selling security holders, LifeMap Sciences, and OncoCyte at an assumed offering price of $3.79 per share, the last reported price of our common shares on NYSE MKT on April 19, 2013, and after deducting estimated aggregate offering expenses payable by them, our adjusted net tangible book value as of December 31, 2012 would have been approximately $14.7 million, or $3.52 per common share. This represents an immediate increase in the net tangible book value of $0.20 per share to our existing stockholders and an immediate dilution in net tangible book value to $0.27 per share to new investors.

The following table illustrates per share dilution:

Assumed public offering price per share		$ 3.79
Net tangible book value per share as of December 31, 2012	$ 0.07	