BIOTIME INC
Form S-3
January 15, 2016
As filed with the Securities and Exchange Commission on January 14, 2016
Registration No. 333-

---

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Form S-3
REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

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

| | |
|---|---|
| California<br>(State or other jurisdiction of incorporation or organization) | 94-3127919<br>(I.R.S. Employer Identification Number) |
| 1301 Harbor Bay Parkway, Suite 100<br>Alameda, California 94502<br>(510) 521-3390 | Russell Skibsted<br>Chief Financial Officer<br>BioTime, Inc.<br>1301 Harbor Bay Parkway, Suite 100<br>Alameda, California 94502<br>(510) 521-3390 |
| (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Office) | (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service) |

Copies 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: From time to time or at one time after the effective date of this Registration Statement in light of market conditions and other factors.

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

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

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

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

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

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

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

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

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities to be Registered | Amount to be Registered(1) | Proposed Maximum Offering Price Per Unit(2) | Proposed Maximum Aggregate Offering Price(2) | Amount of Registration Fee(2) |
|---|---|---|---|---|
| Common Shares (no par value) | 3,068,444 | 2.65 | $ 8,131,376.60 | $ 818.83 |
| TOTALS: | | | | $ 818.83 |

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the “Securities Act”), the Registrant is also registering hereunder an indeterminate number of additional shares of common stock that shall be issuable to prevent dilution resulting from stock splits, stock dividends or similar transactions.
(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c).

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, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange 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.

PROSPECTUS, SUBJECT TO COMPLETION, DATED January 14, 2016

BIOTIME, INC.

3,068,444 Common Shares

This prospectus relates to 3,068,444 BioTime common shares held by the selling security holder named in this prospectus. All of the net proceeds from the sale of the common shares by the selling security holder will belong to the selling security holder and not to us.

The common shares are quoted on the NYSE MKT and the TASE under the symbol BTX. The closing price of the common shares on the NYSE MKT on January 13, 2016 was $2.60.

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

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

The date of this prospectus is , 2016

TABLE OF CONTENTS

Table of Contents

## ABOUT THIS PROSPECTUS

You should rely only on the information contained in or incorporated by reference into this prospectus. We have not authorized any person to give any information or to make any representations other than those contained or incorporated by reference in this prospectus, and, if given or made, you must not rely upon the information or representations as having been authorized. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy securities, nor do this prospectus and any accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation. The information contained in this prospectus speaks only as of the date set forth on the cover page and may not reflect subsequent changes in our business, financial condition, results of operations and prospects even though this prospectus is delivered or securities are sold on a later date.

The registration statement containing this prospectus, including exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement can be read on the Securities and Exchange Commission's (the "SEC) website or at the SEC's public reading room mentioned under the heading "Where You Can Find More Information" in this prospectus.

Unless the context otherwise requires, all references in this prospectus to "BioTime," "Company," "registrant," "we," "us" or "
include BioTime, Inc., a California corporation, and any subsidiaries or other entities controlled by us.

## FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and in the documents incorporated by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended ("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," "estimate," "predict," "potential" or similar exp

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.

The factors described under "Risk Factors" in this prospectus, and in any documents incorporated by reference into this prospectus, and other factors could cause our or our industry's future results to differ materially from historical results or those anticipated or expressed in any of our forward-looking statements. We operate in a continually changing business environment, and new risk factors emerge from time to time. Other unknown or unpredictable factors also could have material adverse effects on our future results, performance or achievements. We cannot assure you that projected results or events will be achieved or will occur.

Table of Contents

BioTime, Inc.

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, for use in a variety of fields of medicine, including various age-related degenerative diseases. We are attempting to develop cell based therapeutic products for diseases such as neurological disorders, cancer, age related macular degeneration, orthopedic disorders, and age-related cardiovascular disease through our subsidiaries Asterias Biotherapeutics, Inc. ("Asterias"), Cell Cure Neurosciences, Ltd. ("Cell Cure Neurosciences"), OrthoCyte Corporation ("OrthoCyte"), and ReCyte Therapeutics, Inc. ("ReCyte"). We are also pursuing nearer term commercial opportunities such as: Renevia™ a product currently in clinical trials in Europe to facilitate cell transplantation and a family of novel blood and urine-based cancer diagnostic tests being developed by our subsidiary OncoCyte Corporation ("OncoCyte"). In conjunction with Hepregen Corporation, we and our subsidiaries ReCyte and ES Cell International Pte Ltd ("ESI") recently formed a new company, Ascendance Biotechnology, Inc. ("Ascendance"), which combines Hepregen's cellular micro-patterning drug and chemical screening technologies, including its HepatoPac® and HepatoMune® micro-patterned liver products, with BioTime's ESI BIO research products, including PureStem® human embryonic progenitor cell lines, associated ESpan™ culture media, and ESI's proprietary stem cell technologies. In the field of research data base products, our subsidiary LifeMap Sciences, Inc. ("LifeMap Sciences") offers the LifeMap Database Suite, and mobile health software products are being developed by our subsidiary LifeMap Solutions, Inc. ("Solutions").

"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 similar to hES 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 or replacing 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.

The field of regenerative medicine includes a broad range of disciplines, including tissue banking, cellular therapy, gene therapy, and tissue engineering. 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 have also developed and out-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 HealthCare Corporation ("CJ Health"), a subsidiary of CheilJedang Corporation.

4

Table of Contents

The following table summarizes the status of our primary research and development programs and product offerings.

| Therapeutic Area | Program or Product | Status | Development Company |
|---|---|---|---|
| Cervical Spinal Cord Injury | AST-OPC1: Glial Cells | Phase I/IIa dose escalation trial underway in cervical spinal cord injury. $14.3 million grant from California Institute for Regenerative Medicine to provide matching funds for AST-OPC1 clinical trial and process development. | Asterias |
| Non-Small Cell Lung Cancer | AST-VAC2 Allogeneic Dendritic Cells Loaded with Telomerase antigen | Proof of concept established in multiple in vitro systems. Agreement by Cancer Research UK to conduct Phase I/IIa clinical trial of AST-VAC2 in subjects with non-small cell lung cancer. Manufacturing process being developed for transfer to Cancer Research UK for clinical trials. | Asterias |
| Age Related Macular Degeneration (AMD) | OpRegen® and OpRegen®-Plus | Phase I/IIa clinical trial underway to determine safety and effective dose for OpRegen® in patients with geographic atrophy stage of dry AMD. The trial will enroll at least 15 patients. We expect this phase to take several months and then will follow each patient for a minimum of 12 months. | Cell Cure Neurosciences |
| Bone Repair | Bone repair using embryonic-derived progenitor cells (Spinal fusion, trauma and cranial maxillo-facial) | Initiated in vitro optimization of bone differentiation and induction using progenitor cells. | OrthoCyte |
| Age Related Vascular Disease, including Cardiovascular Disorders | Therapeutic products for age related vascular disease, including cardiovascular disorders utilizing proprietary ReCyte™ technology and human pluripotent stem cell derived cells. | Evaluating progenitor stem cell-based and cell-derived therapeutics. Conducting ongoing collaboration with researchers at Cornell Weill Medical College for derivation and preclinical testing of endothelial progenitor cells for the treatment of age-related vascular disease. | ReCyte Therapeutics |

Table of Contents

| Nearer-Term Commercial Opportunities | Program or Product | Status | Development Company |
|---|---|---|---|
| HIV-related Lipoatrophy | Renevia™ (the trade name for HyStem® used in lipotransfer) | Conducting a pivotal trial for Renevia™ in Europe to show effectiveness of Renevia™ in lipotransfer for patients suffering from HIV related lipoatrophy of the face.<br>Completed first human clinical safety trial for Renevia™ Results confirmed that Renevia™ was safe in humans at the proposed dosage concentration for this particular use. | BioTime |
| Diagnostic Tests for Lung Cancer, Bladder Cancer; and Breast Cancer | Laboratory Diagnostic Tests | Completion by collaborators at The Wistar Institute of a large, multi-site study involving 600 patients evaluating a blood-based lung cancer diagnostic test;<br>Completion of enrollment in the initial clinical study, which involved 100 patients, of a urine-based bladder cancer diagnostic test conducted in collaboration with investigators in the Department of Pathology, Division of Cytopathology, at a leading medical institution with an international reputation for excellence and discovery;<br>Expansion of the clinical development of a urine-based bladder cancer diagnostic test by initiating a multi-site clinical trial which will involve up to 1,200 patient samples obtained from at least four large urology clinics located throughout the United States; and<br>Expansion of the clinical development of a blood-based breast cancer diagnostic test through collaboration with Abcodia, a UK-based company focusing on the early detection of cancer that has exclusive commercial access to a unique longitudinal biobank of over 5,000,000 serum samples collected through the UK Collaborative Trial for Ovarian Cancer Screening | OncoCyte |
| Cellular micro-patterning drug and chemical screening products and technologies | HepatoPac® and HepatoMune® micro-patterned liver products | Marketing proprietary bioengineered micro-liver platforms for use in drug-development and safety-testing of products in the pharmaceutical and chemical industries<br>Plans to develop new products for use in product development in the biopharmaceutical, diagnostic, cosmetics, environmental, and food industries, including products developed using ESI technology and PureStem® progenitor cell lines | Ascendance |

Table of Contents

| Nearer-Term Commercial Opportunities | Program or Product | Status | Development Company |
|---|---|---|---|
| Marketing On-Line Searchable Data Bases | GeneCards® | A database of human genes that provides concise genomic, transcriptomic, genetic, proteomic, functional and disease related information, on all known and predicted human genes. | LifeMap Sciences |
| | MalaCards™ | A database of human diseases that is based on the GeneCards® platform and contains computerized “cards” classifying information relating to a wide array of human diseases. | |
| | LifeMap Discovery® | A database of embryonic development, stem cell research and regenerative medicine. | |
| | VarElect™ | A powerful, yet easy-to-use application for prioritizing gene variants resulting from next generation sequencing experiments. | |
| | GeneAnalytics™ | A novel gene set analysis tool. | |
| Mobile Health | Mobile health software development | Developing mobile health software products in conjunction with the Icahn School of Medicine at Mount Sinai. | LifeMap Solutions |

Offering Summary

| | |
|---|---|
| Common Shares Offered: | 3,068,444 outstanding BioTime common shares are being offered by the selling security holder. |
| Common Shares Outstanding: | 90,421,566 shares as of January 13, 2016 excluding shares held by BioTime subsidiaries. |
| Trading Symbol: | BTX (NYSE MKT and TASE) |

Table of Contents

## 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 total comprehensive net losses for the nine months ended September 30, 2015 and for the fiscal years ended December 31, 2014, 2013, and 2012 were $33,840,000, $36,288,724, $43,760,366, and $21,362,524, respectively, and we had an accumulated deficit of $215,757,000, $182,190,207, $145,778,547, and $101,895,712, as of September 30, 2015, December 31, 2014, 2013, and 2012, respectively. We primarily finance our operations through the sale of equity securities, licensing fees, royalties on product sales by our licensees, research grants, and subscription fees and advertising revenue from database products. Ultimately, our ability to generate sufficient operating revenue to earn a profit depends upon our success in developing and marketing or licensing our products and technology.

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

We are attempting to develop new medical products and technologies.

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

The experimentation we are doing is costly, time consuming, and uncertain as to its results. We incurred research and development expenses amounting to $29,816,000, $37,532,624, $26,609,423, and $18,116,688 during the nine months ended September 30, 2015 and the fiscal years ended December 31, 2014, 2013, and 2012, respectively, excluding $17,458,766 charged as in process research and development expenses during 2013 in accordance with ASC 805-50 on account of Asterias' acquisition of certain assets from Geron Corporation ("Geron").

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.

#### The operations of Asterias and OncoCyte will result in an increase in our operating expenses and losses on a consolidated basis

The expansion of the operations of our subsidiaries Asterias and OncoCyte will involve substantial expense, including but not limited to hiring additional research and management personnel, and, in the case of OncoCyte, marketing personnel if it successfully completes the development of its initial cancer diagnostic tests, and those expenses will

add to our losses on a consolidated basis for the near future.

Table of Contents

Asterias and OncoCyte are a public companies and will incur costs associated with audits of their respective financial statements, filing annual, quarterly, and other periodic reports with the SEC, holding annual shareholder meetings, listing their common stock for trading, and public relations and investor relations. These costs will be in addition to those incurred by BioTime for similar purposes.

As a developer of therapeutic products derived from hES or iPS cells, Asterias will face substantially the same kind of risks that affect our business, as well as the risks related to our industry generally.

A patent pertaining to the manufacture of retinal pigment epithelium (RPE) products from pluripotent cells was recently issued to one of our competitors and could adversely impact the rights of Cell Cure Neurosciences to manufacture OpRegen®

The United States Patent and Trademark Office has issued U.S. Patent No 9,080,150 defining the basic universal markers of RPE cells essential for therapeutic use. If the process used by Cell Cure Neuroscience to manufacture RPE cells for OpRegen® were to be determined to infringe issued claims in this patent and if the patent claims were to be determined to be valid, Cell Cure Neurosciences might not be permitted to continue to manufacture OpRegen® and commercialize that product in the United States or other countries in which such patent claims have been issued.

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 therapeutic products. The growth in stem cell research also depends upon the availability of funding through private investment and government research grants. In the event of a failed trial of a proposed stem cell product by us or by another company, for reasons of efficacy or safety, it could be increasingly difficult to secure funding or have future investigational new drug applications (“INDs”) cleared by the United States Food and Drug Administration (the “FDA”).

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

We are providing funding to LifeMap Sciences for the development of new software products

Our subsidiary LifeMap Sciences, Inc. has formed a new subsidiary, LifeMap Solutions, Inc., to develop new personal mobile health software products intended to connect users with their complex personal health information and other big data. The field of mobile health products, including both hardware and software products, is new, and there is no certainty that LifeMap Solutions will be successful in developing its planned new products or that it will be successful in commercializing any products that it does develop.

LifeMap Solutions has not yet launched any commercial products, and we would need to continue to provide funding for the development and commercialization of the planned products, unless it is able to obtain financing from other sources. The field of mobile health products is subject to increasing competition, including from large computer and internet technology companies that have much greater financial and marketing resources than we and LifeMap Solutions have.

Table of Contents

The FDA has also taken an interest in the field of on-line or mobile health products and there is a risk that the FDA could determine that LifeMap Solutions' products should be regulated as medical devices under existing laws and regulations, or the FDA could promulgate new regulations that might subject LifeMap Solutions' products to FDA clinical trial and approval procedures, as a prerequisite for permission to use and market the new mobile health products in the United States. Foreign regulatory authorities could make similar determinations or could adopt their own rules regulating the use and marketing of LifeMap Solution's products.

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

The revenues that we have received from sales of our products 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 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 presently markets Hespan®, an artificial plasma volume expander, and Hospira, Inc. and Teva Pharmaceutical Industries, Inc. 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.

Table of Contents

Sales of Hextend® have been adversely affected by safety and use labeling changes required by the FDA

Sales of Hextend® have been adversely affected by certain safety labeling changes required by the FDA for the entire class of hydroxyethyl starch products, including Hextend®. The labeling changes were approved by the FDA in November 2013 and include a boxed warning stating that the use of hydroxyethyl starch products, including Hextend®, increases the risk of mortality and renal injury requiring renal replacement therapy in critically ill adult patients, including patients with sepsis, and that Hextend® should not be used in critically ill adult patients, including patients with sepsis. New warning and precaution information is also required along with new information about contraindications, adverse reactions, and information about certain recent studies. The new warning and precautions include statements to the effect that the use of Hextend® should be avoided in patients with pre-existing renal dysfunction, and the coagulation status of patients undergoing open heart surgery in association with cardiopulmonary bypass should be monitored as excess bleeding has been reported with hydroxyethyl starch solutions in that population and use of Hextend® should be discontinued at the first sign of coagulopathy. The liver function of patients receiving hydroxyethyl starch products, including Hextend® should also be monitored. The approved revised label may adversely affect Hextend® sales since some users of plasma volume expanders might elect to abandon the use of all hydroxyethyl starch products, including Hextend®.

We and our subsidiaries will 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 therapeutic and medical device products, depends upon the amount of money we have

At September 30, 2015, we had $29.4 million of cash and cash equivalents on hand, of which $24.8 million was held by our subsidiaries. During October 2015, we raised an additional $25.5 million and our subsidiary OncoCyte raised an additional $771,000 through sales of BioTime common shares. 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 or limit the pace of our research and development work and planned clinical trials of our product candidates unless our cash resources increase through a growth in revenues or additional equity investment or borrowing.

Table of Contents

The condition of the cells, cell lines and other biological materials that Asterias acquired from Geron could impact the time and cost of commencing Asterias' research and product development programs

The cells, cell lines and other biological materials that Asterias acquired are being stored under cryopreservation protocols intended to preserve their functionality. Asterias has successfully completed the verification of the viability of three lots of AST-OPC1 cells that it intends to use in clinical trials. However, the functional condition of the other materials cannot be certified until they are tested in an appropriate laboratory setting by qualified scientific personnel using validated equipment. Asterias intends to perform that testing on the cells that it intends to use in its research and development programs as the need arises.

To the extent that cells are not sufficiently functional for Asterias' purposes, Asterias would need to incur the time and expense of regenerating cell lines from cell banks, or regenerating cell banks from cell stocks, which could delay and increase the cost of its research and development work using those cells.

Any cell-based products that receive regulatory approval may be difficult and expensive to manufacture on a commercial scale

hES derived therapeutic cells have only been produced on a small scale and not in quantities and at levels of purity and viability that will be needed for wide scale commercialization. If we are successful in developing products that consist of hES cells or other cells or products derived from hES or other cells, we will need to develop, alone or in collaboration with one or more pharmaceutical companies or contract manufacturers, technology for the commercial production of those products.

Our hES cell or other cell based products are likely to be more expensive to manufacture on a commercial scale than most other drugs on the market today. The high cost of manufacturing a product will require that we charge our customers a high price for the product in order to cover our costs and earn a profit. If the price of our products is too high, hospitals and physicians may be reluctant to purchase our products, especially if lower priced alternative products are available, and we may not be able to sell our products in sufficient volumes to recover our costs of development and manufacture or to earn a profit.

We and our subsidiaries will have certain obligations and may incur liabilities arising from clinical trials, and we do not yet know the scope of any resulting expenses that might arise

We or our subsidiaries that conduct clinical trials of product candidates face the risk of incurring liabilities to patients if they incur any injuries as a result of their participation in the clinical trials. We or our subsidiaries will also be obligated to obtain information and prepare reports about the health of the clinical trial patients. In addition, Asterias has assumed Geron's obligations to obtain information and prepare reports about the health of patients, and has assumed any liabilities to those patients that might arise from any injuries they may have incurred, as a result of their participation in the clinical trials of Geron's GRN-OPC1 cell replacement therapy for spinal cord damage and its GRN-VAC1 immunological therapy for certain cancers. We are not aware of any claims by patients alleging injuries suffered as a result of any of our clinical trials or the Geron clinical trials, but if any claims are made and if liability can be established, the amount of any liability that we or our subsidiaries may incur, depending upon the nature and extent of any provable injuries, could exceed any insurance coverage that we or our subsidiaries may obtain, and the amount of the liability could be material to our financial condition.

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

BioTime stem cell research programs, and to a lesser extent, the programs of BioTime's subsidiaries, are directed primarily by our Chief Executive Officer, Dr. Michael West. BioTime's subsidiaries are directed by their respective management teams. The loss of the services of Dr. West or members of senior management of our subsidiaries could

have a material adverse effect on us.

Table of Contents

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

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 the 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 our 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 resources 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 computer 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.

Table of Contents

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 biotechnology and 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 therapeutic and medical device products

The therapeutic 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 or cell-based 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 product 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 product 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 institutional 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;

14

Table of Contents

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 product candidates and possibly resulting in the FDA or other regulatory authorities denying approval of our product candidates;

unforeseen safety issues;

uncertain dosing issues;

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 National Institutes of Health (NIH) has adopted new guidelines for determining the eligibility of hES cell lines for use in federally funded research. The central focus of the proposed guidelines is to assure that hES cells used in federally funded research were derived from human embryos that were created for reproductive purposes, were no longer needed for this purpose, and were voluntarily donated for research purposes with the informed written consent of the donors. The hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research.

California law requires that stem cell research be conducted under the oversight of a stem cell review 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.

Table of Contents

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.

In addition to interference proceedings, the USPTO 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 prior inter partes reexamination proceeding), a proceeding in which a third party can challenge the validity of one of our patents.

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

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

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

The Supreme Court decisions in Mayo Collaborative Services v. Prometheus Laboratories, Inc. and Association for Molecular Pathology v. Myriad Genetics will need to be considered in determining whether certain diagnostic methods and reagents 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, and found that DNA sequences isolated from humans were not patent eligible. Our subsidiary OncoCyte is developing cancer diagnostic tests based on the presence of certain genetic markers and proteins for a variety of cancers. Because OncoCyte’s planned diagnostic tests combine 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 the diagnostic tests that OncoCyte is developing. However, like other developers of diagnostic products,

OncoCyte is evaluating this new Supreme Court decision and new guidelines issued by the United States Patent and Trademark Office (USPTO) 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 USPTO 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 USPTO 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 USPTO’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.

Table of Contents

A derivation proceeding may be instituted by the USPTO 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 makes available opposition-like proceedings in the United States. As with the USPTO 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 USPTO 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

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

Table of Contents

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 and diagnostic tests may be limited by health insurance coverage and government regulation

Success in selling our pharmaceutical and cell-based products, medical devices, and diagnostic tests 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, tests, 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 or diagnostic test 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 or test 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.

The implementation of the ACA in the United States may adversely affect our business.

As a result of the adoption of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively “ACA”) in the United States, substantial changes are being made to the current system for paying for healthcare in the United States, including programs to extend medical benefits to millions of individuals who currently lack insurance coverage. The changes contemplated by the ACA are subject to rule-making and implementation timelines that extend for several years, as well as initiatives in Congress to amend or repeal the law, and this uncertainty limits our ability to forecast changes that may occur in the future. However, implementation of the ACA has already begun with respect to certain significant cost-saving measures, including changes to several government healthcare programs that may cover the cost of our future products and diagnostic tests, including Medicaid, Medicare Parts B and D, and these efforts could have a materially adverse impact on our future financial prospects and performance. For example, with respect to Medicaid, in order for a manufacturer’s products to be reimbursed by federal funding under Medicaid, the manufacturer must enter into a Medicaid rebate agreement with the Secretary of the United States Department of Health and Human Services, and must pay certain rebates to the states based on utilization data provided by each state to the manufacturer and to the Centers for Medicare and Medicaid Services (the “CMS”), and based on pricing data provided by the manufacturer to the federal government. The states share this savings with the federal government, and sometimes implement their own additional supplemental rebate programs. Under the Medicaid drug rebate program, the rebate amount for most branded drug products was previously equal to a minimum of 15.1% of the Average Manufacturer Price, or AMP, or the AMP less Best Price, whichever is greater. Effective January 1, 2010, the ACA generally increased the size of the Medicaid rebates paid by manufacturers for single source and innovator multiple source (brand name) drug product from a minimum of 15.1% to a minimum of 23.1% of the AMP, subject to certain exceptions, for example, for certain clotting factors, the increase is limited to a minimum of 17.1% of the AMP. For non-innovator multiple source

(generic) products, the rebate percentage is increased from a minimum of 11.0% to a minimum of 13.0% of AMP. These increases in required rebates may adversely affect our future financial prospects and performance. The ACA also creates new rebate obligations for products under Medicare Part D, a partial, voluntary prescription drug benefit created by the United States federal government primarily for persons 65 years old and over. The Part D drug program is administered through private insurers that contract with CMS. Beginning in 2011, the healthcare reform law generally requires that in order for a drug manufacturer's products to be reimbursed under Medicare Part D, the manufacturer must enter into a Medicare Coverage Gap Discount Program agreement with the Secretary of the United States Department of Health and Human Services, and reimburse each Medicare Part D plan sponsor an amount equal to 50% savings for the manufacturer's brand name drugs and biologics which the Part D plan sponsor has provided to its Medicare Part D beneficiaries who are in the "donut hole" (or a gap in Medicare Part D coverage for beneficiaries who have expended certain amounts for drugs). The Part D plan sponsor is responsible for calculating and providing the discount directly to its beneficiaries and for reporting these amounts paid to CMS's contractor, which notifies drug manufacturers of the rebate amounts it must pay to each Part D plan sponsor. The rebate requirement could adversely affect our future financial performance, particularly if contracts with Part D plans cannot be favorably renegotiated or the Part D plan sponsors fail to accurately calculate payments due in a manner that overstates our rebate obligation.

Table of Contents

The ACA also introduced a biosimilar pathway that will permit companies to obtain FDA approval of generic versions of existing biologics based upon reduced documentation and data requirements deemed sufficient to demonstrate safety and efficacy than are required for the pioneer biologics. The new law provides that a biosimilar application may be submitted as soon as four years after the reference product is first licensed, and that the FDA may not make approval of an application effective until 12 years after the reference product was first licensed. With the likely introduction of biosimilars in the United States, we expect in the future to face greater competition from biosimilar products, including a possible increase in patent challenges. The FDA has reported meeting with sponsors who are interested in developing biosimilar products, and is developing regulations to implement the abbreviated regulatory review pathway. Regarding access to our products, the ACA established and provided significant funding for a Patient-Centered Outcomes Research Institute to coordinate and fund Comparative Effectiveness Research, or CER. While the stated intent of CER is to develop information to guide providers to the most efficacious therapies, outcomes of CER could influence the reimbursement or coverage for therapies that are determined to be less cost-effective than others. Should any of our products be determined to be less cost effective than alternative therapies, the levels of reimbursement for these products, or the willingness to reimburse at all, could be impacted, which could materially impact our future financial prospects and results.

Risks Related to our Dependence on Third Parties

Asterias could lose its CIRM grant if Asterias fails to meet the clinical trial milestones that are a condition to CIRM's obligation to provide funding

Asterias depends on its grant from the California Institute for Regenerative Medicine (CIRM) as a source of financing for the costs of conducting its Phase I/IIa clinical trial and process development of AST-OPC1. Under the terms of the CIRM grant, Asterias must meet certain efficacy and progress milestones pertaining to the clinical trial. If Asterias fails to meet any of the milestones within the specified time frame, CIRM may discontinue providing grant funds to Asterias, which could force Asterias to postpone, delay, or discontinue the clinical trial and development work for the product.

If we fail to enter into and maintain successful strategic alliances for our therapeutic product candidates, we may have to reduce or delay our product development or increase our expenditures

An important element of our strategy for developing, manufacturing and commercializing our therapeutic product candidates will be entering into strategic alliances with pharmaceutical companies or other industry participants to advance our programs and enable us to maintain our financial and operational capacity. We will face significant competition in seeking appropriate alliances. We may not be able to negotiate alliances on acceptable terms, if at all. If we fail to create and maintain suitable alliances, we may have to limit the size or scope of, or delay, one or more of our product development or research programs, or we will have to increase our expenditures and will need to obtain additional funding, which may be unavailable or available only on unfavorable terms.

Table of Contents

If we are able to enter into product development and marketing arrangements with pharmaceutical companies, we may license product development, manufacturing, and marketing rights to the pharmaceutical company or to a joint venture company formed with the pharmaceutical company. Under such arrangements we might receive only a royalty on sales of the products developed or an equity interest in a joint venture company that develops the product. As a result, our revenues from the sale of those products may be substantially less than the amount of revenues and gross profits that we might receive if we were to develop, manufacture, and market the products ourselves.

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. A collaborative arrangement upon which we might depend might be terminated by our collaboration partner or a partner 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 Health 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 therapeutic 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 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 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.

Table of Contents

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

Risks Related to the Asset Contribution Agreement With Geron

We could be liable to indemnify Geron from certain liabilities

Under the Asset Contribution Agreement through which Asterias acquired Geron's stem cell assets (the “Asset Contribution Agreement”), we and Asterias have agreed to indemnify Geron from and against certain liabilities relating to (a) the distribution of shares of Asterias Series A common stock to Geron stockholders, (b) Asterias’ distribution of certain BioTime warrants to the holders of Asterias Series A common stock, and (c) any distribution of securities by Asterias to the holders of the Asterias Series A common stock within one year following Asterias’ acquisition of Geron’s stem cell assets. That indemnification obligation will last through the fifth anniversary of the expiration, exercise, cancellation or sale of the BioTime warrants whichever occurs first.

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’ 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 covenants, with certain exceptions, is limited to $2,000,000.

Asterias’ operations may divert our management’s attention away from ongoing operations and could adversely affect ongoing operations and business relationships

Now that Asterias has acquired Geron’s stem cell assets and is conducting its own research and development programs, 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.

Risks Related to OncoCyte’s Business Operations

OncoCyte has determined that the initial diagnostic tests that it plans to develop and commercialize will be laboratory developed tests (“LDTs”) that will be performed at a diagnostic laboratory that OncoCyte plans to operate. The decision to develop and commercialize LDTs will give rise to certain risks related to the operation of the business of operating a diagnostic laboratory and performing LDTs, including the following risks.

Table of Contents

OncoCyte will need to obtain regulatory approval of its diagnostic laboratory facilities

OncoCyte will need to receive certification for its planned diagnostic laboratory under the Clinical Laboratory Improvements Amendment ("CLIA"). In addition to meeting federal regulatory requirements, each state has its own laboratory certification and inspection requirements for a CLIA laboratory that must be met in order to sell diagnostic tests in the state. CLIA licensed laboratories can lose their licenses if problems arise during periodic regulatory inspections.

The FDA may impose additional regulations for laboratory developed tests such as the ones OncoCyte is developing

The FDA issued two draft guidance documents that set forth a proposed risk-based regulatory framework that would apply varying levels of FDA oversight to LDTs such as those OncoCyte is developing. If the FDA implements new regulatory measures:

OncoCyte may be required to obtain pre-market clearance or approval before selling its diagnostic tests;

As a result of required FDA pre-market review, OncoCyte's tests may not be cleared or approved on a timely basis, if at all;

FDA labeling requirements may limit OncoCyte's claims about its diagnostic tests, which may have a negative effect on orders from physicians;

The regulatory approval process may involve, among other things, successfully completing additional clinical trials and making a 510(k) submission, or filing a pre-market approval application with the FDA; and,

If regulatory actions affect any of the reagents OncoCyte obtain from suppliers and use in conducting its tests, its business could be adversely affected in the form of increased costs of testing or delays, limits or prohibitions on the purchase of reagents necessary to perform its testing.

OncoCyte will depend on Medicare and a limited number of private payers for a significant portion of its revenues, and its revenues could decline if these payers fail to provide timely and adequate payment for its diagnostic tests

OncoCyte expects that a substantial portion of the patients for whom it will perform diagnostic tests will have Medicare as their primary medical insurance. Even if OncoCyte's planned tests are otherwise successful, reimbursement for the Medicare-covered portions of its planned tests might not, without Medicare reimbursement, produce sufficient revenues to enable it to reach profitability and achieve its other commercial objectives.

Medicare and other third-party payers have increased their efforts to control the cost, utilization, and delivery of health care services, and have undertaken measures to reduce payment rates for and decrease utilization of clinical laboratory testing. Because of the cost-trimming trends, any third-party payers that will cover and provide reimbursement for OncoCyte's diagnostic tests may suspend, revoke or discontinue coverage at any time, or may reduce the reimbursement rates payable to OncoCyte. Any such action could have a negative impact on OncoCyte's revenues, which may have a material adverse effect on its financial condition, results of operations and cash flows.

Changes in healthcare laws and policies may have a material adverse effect on OncoCyte's financial condition, results of operations and cash flows

The ACA substantially changed the way health care is financed by both governmental and private insurers. Among the ACA's key changes, the ACA reduced payment rates under the Medicare Clinical Laboratory Fee Schedule and established an Independent Payment Advisory Board to reduce the per capita rate of growth in Medicare spending if

spending exceeds a target growth rate. Such provisions may negatively impact payment rates for OncoCyte's diagnostic tests.

Table of Contents

The Protecting Access to Medicare Act of 2014 ("PAMA") significantly altered the payment methodology under the Clinical Laboratory Fee Schedule that determines Medicare coverage for laboratory tests. Under PAMA, clinical laboratories are required to report test payment data for each Medicare-covered clinical diagnostic lab test and beginning in 2017, the Medicare payment rate for each clinical diagnostic lab test will be equal to the weighted median amount for the test from the most recent data collection period.

Congress has proposed on several occasions to impose a 20% coinsurance payment requirement on patients for clinical laboratory tests reimbursed under the Medicare Clinical Laboratory Fee Schedule, which would require OncoCyte to bill patients for these amounts. In the event that Congress were to ever enact such legislation, the cost of billing and collecting for OncoCyte's tests could often exceed the amount actually received from the patient.

On September 25, 2015, CMS released preliminary determinations for the calendar year 2016 for the Medicare Clinical Laboratory Fee Schedule for some test codes, including some for oncology diagnostics, as had been anticipated. These preliminary determinations were based on a cross walk approach rather than a gap-fill approach. A cross walk approach matches a new code for a diagnostic against existing codes to determine the appropriate payment rate; while a gap-fill approach looks at local pricing patterns, including charges for the tests and any discounts on charges and payments determined by other payers. At this point it is not clear what methodology CMS may use in their determinations for future diagnostics.

Beginning January 1, 2017, Medicare payment for any new advanced diagnostic test will be based on the list price or charge. After the test is commercially available for two quarters, the laboratory will be required to report payment and volume information and that data will be used to set payment for the test for the following year.

If data shows that the list price was greater than 130% of the payment using established methodology (a weighted median), CMS will recoup the difference from the laboratory through a payment claw back

Payment will be updated annually based on the weighted median of commercial payer reimbursement.

We cannot predict whether future health care initiatives will be implemented at the federal or state level, or how any future legislation or regulation may affect OncoCyte. The expansion of government's role in the U.S. health care industry as a result of the ACA, and changes to the reimbursement amounts paid by Medicare and other payers for diagnostic tests may have a materially adverse effect on OncoCyte's business, financial condition, results of operations and cash flows.

Because of certain Medicare billing policies, OncoCyte may not receive complete reimbursement for tests provided to Medicare patients

Medicare has coverage policies that can be national or regional in scope. Coverage means that the test or assay is approved as a benefit for Medicare beneficiaries. If there is no coverage, neither the supplier nor any other party, such as a diagnostic laboratory, may receive reimbursement from Medicare for the service. Regional policies are directed by Medicare's regional Medicare Administrative Contractors ("MACs"). Reimbursement for diagnostic testing may be negatively impacted by California MAC's policies.

Long payment cycles of Medicare, Medicaid and/or other third-party payors, or other payment delays, could hurt OncoCyte's cash flows and increase its need for working capital

Medicare and Medicaid have complex billing and documentation requirements that OncoCyte will have to satisfy in order to receive payment. Failure to comply with these requirements and other laws applicable to billing may result in, among other things, non-payment, refunds, exclusion from government healthcare programs, and civil or criminal liabilities, any of which may have a material adverse effect on OncoCyte's revenues and earnings. Similarly, the failure

of private health insurers or other private third-party payers to properly process OncoCyte's payment claims in a timely manner could delay its receipt of payment for its diagnostic tests and services, which may have a material adverse effect on its cash flows.

Table of Contents

Private health insurance company policies may deny coverage or limit the amount they will reimburse OncoCyte for the performance of its diagnostic tests

Patients who are not covered by Medicare will generally rely on health insurance provided by private health insurance companies. If OncoCyte is considered a “non-contracted provider” by a third-party payer, that payer may not reimburse patients for diagnostic tests performed by OncoCyte or doctors within the payer’s network of covered physicians may not use its services to perform diagnostic tests for their patients. As a result, OncoCyte may need to enter into contracts with health insurance companies or other private payers to provide diagnostic tests to their insured patients at specified rates of reimbursement which may be lower than the rates OncoCyte might otherwise collect.

Risks Pertaining to Our Common Shares

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

Because we are engaged in the development of pharmaceutical and stem cell therapy products and cancer diagnostic tests, 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 therapy or diagnostic test, even though the outcome of those trials and the likelihood of ultimate FDA approval of a therapeutic product 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.

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

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

Table of Contents

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 holders of our common shares. 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

The trading market for our common shares will depend, in part, on the research and reports that securities analysts publish about our business and our common shares. We do not have any control over these analysts. There is no guarantee that securities analysts will cover our common shares. If securities analysts do not cover our common shares, the lack of research coverage may adversely affect the market price of those shares. If securities analysts do cover our common shares, they could issue reports or recommendations that are unfavorable to the price of our common shares, and they could downgrade a previously favorable report or recommendation, and in either case our share prices 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 our share prices or trading volume to decline.

Investors in our common stock may experience dilution of their 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 127,000,000 shares of capital stock consisting of 125,000,000 common shares and 2,000,000 “blank check” preferred shares. As of December 31, 2015, there were 94,894,152 common shares outstanding of which 4,472,586 were held by our subsidiaries, 5,194,313 common shares reserved for issuance upon the exercise of outstanding options under our employee stock option plans; and 9,190,782 shares reserved for issuance upon the exercise of common share purchase warrants, including the publicly traded warrants.

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

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

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

ownership of the subsidiaries.

Table of Contents

The market price of our common shares 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. 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. 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.

## USE OF PROCEEDS

All of the proceeds of from the sale of our common shares by the selling security holder through this prospectus will belong to the selling security holder and not to us.

## MARKET FOR OUR COMMON EQUITY

Our common shares are traded on the NYSE MKT and the TASE under the ticker symbol BTX. The following table sets forth the range of high and low closing prices for our common shares for the fiscal years ended December 31, 2015 and 2014, as reported by the NYSE MKT.

| Quarter Ended | High | Low |
|---|---|---|
| March 31, 2013 | $4.99 | $3.20 |
| June 30, 2013 | $4.82 | $3.39 |
| September 30, 2013 | $4.29 | $3.64 |
| December 31, 2013 | $4.12 | $3.28 |
| March 31, 2014 | $4.13 | $3.11 |
| June 30, 2014 | $3.29 | $2.29 |
| September 30, 2014 | $3.79 | $2.35 |
| December 31, 2014 | $3.78 | $2.95 |
| March 31, 2015 | $5.46 | $3.81 |
| June 30, 2015 | $5.88 | $3.51 |
| September 30, 2015 | $3.71 | $2.53 |
| December 31, 2015 | $4.38 | $3.19 |

As of November 30, 2015, there were 14,596 holders of the common shares based on the share position listing.

### Dividend Policy

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

Table of Contents

## DESCRIPTION OF SECURITIES

### Common Shares

Our Articles of Incorporation currently authorize the issuance of up to 125,000,000 common shares, no par value, of which 94,894,152 shares were outstanding at January 13, 2016 including 4,472,586 shares held by our subsidiaries.

As of November 30, 2015, there were 14,596 holders of our common shares based on the share position listing. Each holder of record is entitled to one vote for each outstanding common share owned by him on every matter properly submitted to the shareholders for their vote.

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

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

### Transfer Agent

The transfer agent and registrar for the common shares is American Stock Transfer and Trust Company, 6201 15th Avenue, Brooklyn, New York 11219.

### Preferred Shares

Our Articles of Incorporation currently authorize the issuance of up to 2,000,000 preferred shares, no par value. We may issue preferred shares in one or more series, at any time, with such rights, preferences, privileges and restrictions as the Board of Directors may determine, all without further action of our shareholders. Any series of preferred shares which may be authorized by the Board of Directors in the future may be senior to and have greater rights and preferences than the common shares. There are no preferred shares presently outstanding and we have no present plan, arrangement, or commitment to issue any preferred shares. As long as our common shares are listed on the TASE, we intend to comply with their listing rule which prohibits a company from issuing preferred shares while its common shares are listed on that stock exchange.

## PLAN OF DISTRIBUTION

The common shares offered by this prospectus are being registered for sale for the account of the holder of those securities. The security holder for whose account common shares are being registered through this prospectus is sometimes referred to in this prospectus as “selling security holder,” and information about the selling security holder and the common shares that it may sell through this prospectus is discussed in this section. The selling security holder may elect to sell some or all of its common shares in reliance upon Rule 144 under the Securities Act, rather than through this prospectus and the registration statement of which this prospectus is a part.

### Line of Credit Shares

During 2006, 2007, 2008, and 2009 we issued common shares to the selling shareholder and certain other investors who loaned money to us under line of credit agreements, and in August 2009 we retired the line of credit indebtedness primarily through an exchange of common shares for line of credit promissory notes. This prospectus includes the 868,444 shares issued to the selling shareholder in connection with the line of credit loans, including shares issued in connection with the funding of line of credit loans and shares issued to retire those loans.

Table of Contents

2009 Private Placement

During May and July 2009, we sold 2,200,000 common shares and 2,200,000 warrants to the selling security holder for $4,000,000. We agreed to register those shares for sale under the Securities Act and the 2,200,000 shares are included in this prospectus. Broadwood Partners, L.P. exercised those warrants during May 2010 and the shares issued to them upon the exercise of those warrants were included in a prior registration statement under the Securities Act.

Plan of Distribution

Sale of Shares by the Selling Security Holder

The selling security holder has advised us that it may hold its common shares for investment purposes, or may sell its common shares from time to time by any method that is deemed to be an "at- the- market" equity offering as defined in Rule 415 promulgated under the Securities Act, including sales made directly on or through the NYSE MKT or any other existing trading market for the common shares in the U.S. or to or through a market maker, at prices related to the prevailing market price, or through block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction, or in privately negotiated transactions, or through one more of the foregoing transactions.

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

The selling security holder and any broker-dealers who participate in the sale of common shares may be deemed to be "underwriters" as defined in the Securities Act. Any commissions paid or any discounts or concessions allowed to any broker-dealers in connection with the sale of the common shares and any profits received on the resale of any common shares purchased by broker-dealers as principals, may be deemed to be underwriting discounts and commissions under the Securities Act. Under the terms of the applicable Registration Rights Agreements, we have agreed to indemnify the selling security holder against certain liabilities related to the sale of the common shares through this prospectus, including certain liabilities arising under the Securities Act.

The selling security holder has advised us that during the time that it may be engaged in a distribution of its common shares the selling security holder will (a) not engage in any stabilization activity in connection with our securities, (b) cause to be furnished to each broker through whom their common shares may be offered the number of copies of this prospectus required by the broker, and (c) not bid for or purchase any of our securities, or attempt to induce any person to do so, other than as permitted under the Exchange Act.

The following table shows the number of our common shares beneficially owned by the selling security holder prior to this offering, the maximum number of common shares that may be sold by the selling security holder through this prospectus, and the amount and percentage of the outstanding common shares that will be owned by the selling security holder if the selling security holder sells all of the shares registered for its account:

Table of Contents

| Name | Shares Owned Before Offering | Shares Offered | Shares Owned After Offering | Percentage of Outstanding Common Shares Owned After Offering |
|---|---|---|---|---|
| Broadwood Partners, L.P. | 21,864,396[1] | 3,068,444 | 18,795,952 | |

(1) Does not include shares beneficially owned by Neal C. Bradsher or shares that he may acquire upon the exercise of stock options. Mr. Bradsher is the President of the General Partner of Broadwood Partners, L.P. and is a member of our Board of Directors

LEGAL MATTERS

The legality of the issuance of the common shares offered hereby is being passed upon for us by Thompson, Welch, Soroko & Gilbert LLP, San Francisco and San Rafael, California.

EXPERTS

The financial statements incorporated in this prospectus by reference from our Annual Report on Form 10-K for the year ended December 31, 2014 have been audited by OUM & Co. LLP, an independent registered public accounting firm, to the extent and for the periods set forth in their report incorporated herein by reference, and are incorporated herein in reliance upon the report given upon the authority of said firm as experts in accounting and auditing.

The financial statements incorporated in this prospectus by reference from our Annual Report on Form 10-K for the years ended December 31, 2013 and 2012 have been audited by Rothstein Kass, an independent public accounting firm, to the extent and for the periods set forth in their report incorporated herein by reference, and are incorporated herein in reliance upon the report given upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement constitutes a part of a registration statement on Form S-3 filed under the Securities Act. As permitted by the SEC's rules, this prospectus supplement, which forms a part of the registration statement, does not contain all the information that is included in the registration statement. You will find additional information about us in the registration statement. Any statements made in this prospectus supplement concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

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

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

We make available free of charge on or through our Internet website www.biotimeinc.com our Annual Report on Form 10–K, Quarterly Reports on Form 10–Q, Current Reports on Form 8–K, and amendments to those reports filed or

furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file the material with, or furnish it to, the SEC.

Table of Contents

## INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the securities being offered pursuant to this prospectus. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed below in "Where You Can Find More Information." The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, filed with the SEC on March 11, 2015, as amended by Amendment No. 1 thereto filed with the SEC on April 29, 2015;
- our Quarterly Report on Form 10-Q for the three month period ended March 31, 2015 filed with the SEC on May 8, 2015;
- our Quarterly Report on Form 10-Q for the three and six month periods ended June 30, 2015 filed with the SEC on August 11, 2015;
- our Quarterly Report on Form 10-Q for the three and nine month periods ended September 30, 2015 filed with the SEC on November 9, 2015;
- our Current Reports on Form 8-K filed with the SEC on February 6, February 17, March 12, April 20, May 13, May 14, July 2, July 15, August 20, September 4, September 14, September 25, September 28, September 30, October 2, and October 7, October 15, October 19, November 16, November 24, December 1, December 11, December 15, December 30, December 31, 2015, and January 12, 2016 (not including any information furnished under Items 2.02 or 7.01 of Form 8-K, including the related exhibits, which information is not incorporated by reference herein);
- the description of our common shares contained in our registration statement on Form 8-A (File No. 001-12830) filed with SEC on October 26, 2009, including any amendment or report filed for the purpose of updating such description;
- our definitive proxy solicitation materials filed with the SEC on June 11, 2015; and
- all of the filings pursuant to the Securities Exchange Act of 1934, as amended, after the date of the filing of the original registration statement and prior to the effectiveness of the registration statement.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act before the date our offering is terminated or completed are deemed to be incorporated by reference into, and to be a part of, this prospectus supplement.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to BioTime, Inc., Attention: Secretary, 1301 Harbor Bay Parkway, Alameda, California 94502, (510) 521-3390.

30

Table of Contents

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

ITEM 14. Other Expenses of Issuance and Distribution

The following sets forth the costs and expenses payable by us in connection with the distribution of the securities being registered. We have estimated all amounts except the SEC registration fee.

| | |
|---|---|
| SEC registration fee | $819 |
| Printing and duplicating expenses | 5,000 |
| Legal fees and expenses (other than blue sky) | 10,000 |
| Accounting fees and expenses | 20,000 |
| Miscellaneous | 5,000 |
| Total: | $40,819 |

ITEM 15. Indemnification of Directors and Officers

Section 317 of the California Corporations Code permits indemnification of directors, officers, employees and other agents of corporations under certain conditions and subject to certain limitations. In addition, Section 204(a)(10) of the California Corporations Code permits a corporation to provide, in its articles of incorporation, that directors shall not have liability to the corporation or its shareholders for monetary damages for breach of fiduciary duty, subject to certain prescribed exceptions. Article Four of the Articles of Incorporation of the Registrant contains provisions for the indemnification of directors, officers, employees and other agents within the limitations permitted by Section 317 and for the limitation on the personal liability of directors permitted by Section 204(b)(10), subject to the exceptions required thereby.

ITEM 16. Exhibits

| Exhibit Numbers | Description |
|---|---|
| 4.1 | Specimen of common share certificate. (1) |
| 5.1 | Opinion of Thompson, Welch, Soroko & Gilbert LLP * |
| 23.1 | Consent of Rothstein Kass, independent public accounting firm. * |
| 23.2 | Consent of OUM & Co., LLP, independent registered public accounting firm. * |
| 23.3 | Consent of Thompson, Welch, Soroko & Gilbert LLP (included in Exhibit 5.1). * |

(1) Incorporated by reference to Registration Statement on Form S-1, File Number 33-44549 filed with the Securities and Exchange Commission on December 18, 1991, and Amendment No. 1 and Amendment No. 2 thereto filed with the Securities and Exchange Commission on February 6, 1992 and March 7, 1992, respectively.

* Filed herewith.

Table of Contents

ITEM 17. Undertakings

The undersigned undertakes:

(1) To file during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in this Registration Statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration

statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

Table of Contents

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by final adjudication of such issue.

The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act (“Act”) in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Alameda, State of California on January 14, 2016.

BIOTIME, INC.

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

By: s/Aditya Mohanty
Aditya Mohanty,
Co-Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-3 has been signed below by the following persons in the capacities and on the dates indicated:

| Signature | Title | Date |
|---|---|---|
| s/Michael D. West<br>MICHAEL D. WEST | Co-Chief Executive Officer and Director<br>(Co-Principal Executive Officer) | January 14, 2016 |
| s/Aditya Mohanty<br>ADITYA MOHANTY | Co-Chief Executive Officer<br>(Co-Principal Executive Officer) | January 14, 2016 |
| s/Russell Skibsted<br>RUSSELL SKIBSTED | Chief Financial Officer<br>(Principal Financial and Accounting Officer) | January 14, 2016 |
| s/Deborah Andrews<br>DEBORAH ANDREWS | Director | January 14, 2016 |
| s/Neal C. Bradsher<br>NEAL C. BRADSHER | Director | January 14, 2016 |
| s/Stephen L. Cartt<br>STEPHEN L. CARTT | Director | January 14, 2016 |
| s/Stephen C. Farrell<br>STEPHEN C. FARRELL | Director | January 14, 2016 |

| | | |
|---|---|---|
| s/Alfred D. Kingsley<br>ALFRED D. KINGSLEY | Director | January 14, 2016 |

Table of Contents

| | | |
|---|---|---|
| s/Michael H. Mulroy<br>MICHAEL H. MULROY | Director | January 14, 2016 |
| s/Angus Russell<br>ANGUS RUSSELL | Director | January 14, 2016 |
| s/David Schlachet<br>DAVID SCHLACHET | Director | January 14, 2016 |
| s/Judith Segall<br>JUDITH SEGALL | Director | January 14, 2016 |