

BIOTIME INC  
Form 424B3  
June 11, 2014

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As filed pursuant to Rule 424(b)(3)  
Registration No. 333- 187710

PROSPECTUS

BIOTIME, INC.

8,902,077 Common Shares

8,000,000 Common Share Purchase Warrants

8,000,000 Common Shares Issuable Upon the Exercise of Warrants

This prospectus relates to 8,000,000 warrants to purchase our common shares (the “Contribution Warrants”) to be distributed by Asterias Biotherapeutics, Inc. (“Asterias”) to the holders of its Series A common stock. We issued the Contribution Warrants to Asterias pursuant to an Asset Contribution Agreement that we and Asterias entered into with Geron Corporation (“Geron”). See “THE ASSET CONTRIBUTION AGREEMENT” and “PLAN OF DISTRIBUTION.” This prospectus also relates to the 8,000,000 common shares issuable upon the exercise of the Contribution Warrants.

In addition, this prospectus relates to 8,902,077 common shares that we issued to Asterias under the Asset Contribution Agreement. Asterias may offer those shares for sale from time to time in “at the market” transactions or in privately negotiated transactions. See “PLAN OF DISTRIBUTION.”

All of the net proceeds from the sale of common shares by Asterias will belong to Asterias and not to us. See “Use of Proceeds” on page 24.

The offering of common shares by Asterias through this prospectus in “at-the-market” transactions will be deemed a primary “at-the market” offering by BioTime in which Asterias, as a statutory “underwriter” as defined in the Securities Act of 1933, as amended (the “Securities Act”), will offer those shares to the public through a registered broker-dealer. Asterias will also be deemed an underwriter with respect to the distribution of the Contribution Warrants to holders of Asterias Series A common stock.

Our common shares are listed on the NYSE MKT under the symbol BTX. The closing price of our common shares on the NYSE MKT on June 6, 2014 was \$2.85. We have applied to list the Contribution Warrants on the NYSE MKT. There was previously no public market for the Contribution Warrants.

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 10.

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

The date of this prospectus is June 11, 2014

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2

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## PROSPECTUS SUMMARY

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

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

### Note to Holders of Asterias Series A Common Stock

Holders of shares of Asterias Series A common stock (“Series A Shares”) will be receiving this prospectus in connection with their receipt of Contribution Warrants that Asterias will distribute to holders of its Series A Shares (the “Contribution Warrants Distribution”). Asterias is making the Contribution Warrants Distribution under the terms of the Asset Contribution Agreement among Geron, Asterias, and us. This prospectus contains important information about us and information about the Asset Contribution Agreement and information about the Contribution Warrants. You should read this prospectus carefully.

While we do not believe that holders of Asterias Series A Shares who receive Contribution Warrants in the Contribution Warrants Distribution will have taxable income from their receipt of the Contribution Warrants it is possible that the Internal Revenue Service or other taxing authorities could assert that receipt of Contribution Warrants in the Contribution Warrants Distribution described in this prospectus would result in taxable income to holders of Series A Shares. You should consult your tax advisors concerning the tax consequences of the Contribution Warrants Distribution to you under any and all tax laws and regulations to which you are subject.

### BioTime, Inc.

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

### Overview

We are a biotechnology company focused on the emerging field of regenerative medicine. Our core technologies center on stem cells capable of becoming all of the cell types in the human body, a property called pluripotency. Products made from these “pluripotent” stem cells are being developed by us and our subsidiaries, for use in a variety of fields of medicine. Four of our subsidiaries, Asterias, Cell Cure Neurosciences, Ltd (“Cell Cure Neurosciences”), OrthoCyte Corporation (“OrthoCyte”), and ReCyte Therapeutics, Inc. (“ReCyte”) are focused on developing cell based

therapeutic products for diseases such as neurological disorders, cancer, age related macular degeneration, orthopedic disorders, and age-related cardiovascular disease. Our commercial strategy targets near-term opportunities such as: Renevia™ a product currently in clinical trials in Europe to facilitate cell transplantation; ReGlyde™ and Premvia™ for tendon and dermatological applications, respectively; PanC-Dx™, a family of novel blood and urine-based cancer screens; our current line of research products including PureStem® cell lines and associated ESpan™ culture media, human embryonic stem cell lines derived by our subsidiary ES Cell International Pte Ltd (“ESI”) under current good manufacturing practices (“cGMP”); HyStem® hydrogel products; the LifeMap Database Suite; and mobile health software products.

3

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“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-like cells. These pluripotent hES and iPS cells have the unique property of being able to branch out into each and every kind of cell in the human body, including the cell types that make up the brain, the blood, the heart, the lungs, the liver, and other tissues. Unlike adult-derived stem cells that have limited potential to become different cell types, pluripotent stem cells may have vast potential to supply an array of new regenerative therapeutic products, especially those targeting the large and growing markets associated with age-related degenerative disease. Unlike pharmaceuticals that require a molecular target, therapeutic strategies in regenerative medicine are generally aimed at regenerating affected cells and tissues, and therefore may have broader applicability. Regenerative medicine represents a revolution in the field of biotechnology with the promise of providing therapies for diseases previously considered incurable.

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 licensed manufacturing and marketing rights to Hextend<sup>®</sup>, 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<sup>®</sup> 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<sup>®</sup> is the only blood plasma volume expander that contains lactate, multiple electrolytes, glucose, and a medically approved form of starch called hetastarch. Hextend<sup>®</sup> is sterile, so its use avoids the risk of infection. Health insurance reimbursements and HMO coverage now include the cost of Hextend<sup>®</sup> used in surgical procedures.

Hextend<sup>®</sup> is manufactured and distributed in the United States by Hospira, Inc., and in South Korea by CJ Health Corporation (“CJ Health”), a subsidiary of Cheil Jedang Corp., under license from us.

The following table shows our subsidiaries, their respective principal fields of business, our percentage ownership as at March 31, 2014, and the country where their principal business is located:

Subsidiary	Field of Business	BioTime Ownership	Country
Asterias Biotherapeutics, Inc.	Research, development and commercialization of human therapeutic products from stem cells potentially in the fields of neurology, oncology, orthopedics, and cardiology	71.6%	USA
ES Cell International Pte Ltd	Stem cell products for research, including clinical grade cell lines produced under cGMP	100%	Singapore
OncoCyte Corporation	Cancer diagnostics	75.3%	USA
OrthoCyte Corporation	Orthopedic diseases, including chronic back pain and osteoarthritis	100%	USA
	Age-related macular degeneration		
Cell Cure Neurosciences Ltd.	Multiple sclerosis	62.5%	Israel
	Parkinson’s disease	94.8%	USA

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ReCyte Therapeutics, Vascular disorders, including cardiovascular-related diseases, ischemic conditions, vascular injuries

	Stem cell-derived endothelial and cardiovascular related progenitor cells for research, drug testing, and therapeutics		
BioTime Asia, Limited	Stem cell products for research	81%	Hong Kong
LifeMap Sciences, Inc.	Genetic, disease, and stem cell databases	73.2%	USA
LifeMap Sciences, Ltd.	Stem cell database	(1)	Israel
LifeMap Solutions, Inc.	Mobile health software	(1)	USA

(1) LifeMap Sciences, Ltd. and LifeMap Solutions, Inc. are wholly-owned subsidiaries of LifeMap Sciences, Inc.

4

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## Additional Information

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

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

## The Asset Contribution

Under the Asset Contribution Agreement, Asterias received the following assets from Geron and us in exchange for Asterias securities and the assumption of certain liabilities (the "Asset Contribution"):

From Geron:

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

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

· certain laboratory equipment;

· certain contracts;

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

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

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



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

From Us:

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

The Contribution Warrants to purchase 8,000,000 additional BioTime common shares, exercisable for a period of five years at a price of \$5.00 per share, subject to adjustment for certain transactions (See “DESCRIPTION OF SECURITIES—Contribution Warrants.”);

Cancellation of the \$5,000,000 principal balance of a promissory note payable to BioTime for cash advanced to Asterias or paid for Asterias’ account;

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

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

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

We have subsequently entered into a Materials Transfer Agreement with Asterias through which we have granted Asterias the non-exclusive right to use certain of our HyStem<sup>®</sup> hydrogel formulations for research purposes, and an option for a period of thirty-six months to negotiate a non-exclusive sub-license for use of those hydrogels in neurological, cardiovascular and orthopedic human cell therapy applications.

Cash Contribution to Asterias by Private Investor

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

6

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## Assumed Liabilities

Asterias assumed the obligations and liabilities of Geron and its affiliates relating to the assets Asterias acquired from them and attributable to periods, events or circumstances after the date of the acquisition, and the obligations of Geron and its affiliates to be performed under the contracts that Geron assigned to Asterias. Asterias also assumed and agreed to bear the cost of certain patent interference proceedings that it subsequently settled. Asterias reimbursed a Geron for certain costs incurred after July 4, 2013 relating to the maintenance or prosecution of patents and patent applications assigned to it. Asterias assumed all obligations and liabilities of Geron arising from the Clinical Trials, including the obligation to obtain information and prepare reports to the FDA about the health of patients who participated in the Clinical Trials, and liabilities to patients that might arise from the Clinical Trials. We refer to the obligations of Geron and its affiliates assumed by Asterias as the “Assumed Geron Liabilities.”

## Ownership of Asterias following the Asset Contribution

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

To Geron, 6,537,779 shares of Asterias Series A common stock, par value \$0.0001 per share (“Asterias Series A Shares”);

To BioTime, 21,773,340 Asterias Series B Shares, and warrants to purchase 3,150,000 Asterias Series B Shares, exercisable for a period of three years from the date of issue at an exercise price of \$5.00 per share; and

To Romulus, 2,136,000 Asterias Series B Shares, and warrants to purchase 350,000 additional Asterias Series B Shares exercisable for a period of three years from the date of issue at an exercise price of \$5.00 per share.

Immediately after the completion of the Asset Contribution, and before the Series A Distribution described below, we held approximately 71.6% of the Asterias common stock as a whole, Geron held 100% of the Asterias Series A Shares and approximately 21.4% of the Asterias common stock as a whole, and Romulus held approximately 7% of the Asterias common stock as a whole. The Asterias warrants that we and Romulus received will enable us and Romulus to increase our collective ownership in Asterias by approximately 2.2%, which would reduce Geron’s ownership in Asterias to approximately 19.2%.

The Asterias Series A Shares and Asterias Series B Shares are identical in substantially all respects and will vote together as a single class, without distinction as to series on all matters except as may otherwise be required by Delaware law. The two significant differences between the Asterias Series A Shares and Asterias Series B shares are:

Asterias may declare and pay dividends or other distributions on Asterias Series A Shares without paying a corresponding dividend or distribution on the Asterias Series B Shares. This difference in dividend and distribution rights will allow Asterias to make the Contribution Warrants Distribution to the holders of the Asterias Series A Shares.

The Asterias Series B Shares may be converted into Asterias Series A Shares, at Asterias’ election, at any time by resolution of Asterias’ Board of Directors after Asterias completes the Contribution Warrants Distribution. Each Asterias Series B Share will be convertible into one Asterias Series A Share.

## Royalty Agreement

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

## Cash Investment in BioTime by Private Investor

We entered into a Stock and Warrant Purchase Agreement with Romulus (the “Romulus Agreement”) under which we sold to Romulus 1,350,000 common shares and warrants to purchase approximately 650,000 additional common shares (the “Investor Warrants”) for \$5,000,000 in cash. The Investor Warrants are subject to substantially the same terms and conditions as the Contribution Warrants except that they will expire on January 13, 2016. Prior to the closing of the Asset Contribution, we loaned the funds that we received from Romulus to Asterias or used the funds to pay Asterias’ expenses. The \$5,000,000 that we loaned to Asterias or paid for Asterias’ account was credited towards our obligation under the Asset Contribution Agreement to contribute \$5,000,000 in cash to Asterias, and upon the closing of the Asset Contribution, we cancelled that indebtedness. We have registered all of the common shares, Investor Warrants, and common shares issuable upon the exercise of the Investor Warrants, issued to Romulus under the Romulus Agreement for sale under the Securities Act.

## The Series A Distribution

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

## The Contribution Warrants Distribution

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

Offering Summary

Warrants Offered 8,000,000 Contribution Warrants that Asterias will distribute to the holders of Asterias Series A Shares pursuant to the Asset Contribution Agreement.

Common Shares Offered 8,000,000 common shares issuable upon the exercise of the Contribution Warrants.

8,902,077 common shares that we issued to Asterias under the Asset Contribution Agreement and that Asterias may offer for sale. See "PLAN OF DISTRIBUTION."

Common Shares Outstanding 72,149,329 shares as of June 6, 2014.

Contribution Warrants: The Contribution Warrants will be evidenced by warrant certificates.

Contribution Warrants may be exercised by completing the purchase form on the back of the warrant certificate and delivering it, together with payment of the exercise price, to the Warrant Agent, American Stock Transfer & Trust Company, LLC, 6201 15<sup>th</sup> Avenue, Brooklyn, New York 11219.

Payment of the exercise price of the Contribution Warrants must be made in by personal check or bank cashier's check or by wire transfer.

So long as our common shares are publicly traded, the Contribution Warrants may not be exercised on any day on which the closing price of our common shares for the day is lower than the exercise price.

Each Contribution Warrant entitles the holder to purchase one common share at a price of \$5.00 per share. The Contribution Warrants will expire on October 1, 2018 and may not be exercised after that date. The number of shares issuable upon the exercise of the Contribution Warrants and the exercise price per share will be proportionally adjusted in the event of a stock split, stock dividend, combination, or recapitalization of the common shares, or as a result of certain other transactions. See "DESCRIPTION OF SECURITIES—Contribution Warrants."

## RISK FACTORS

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

### Risks Related to Our Business Operations

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

Our comprehensive net losses for the three months ended March 31, 2014 and for the fiscal years ended December 31, 2013, 2012, and 2011 were \$8,206,254, \$43,760,366, \$21,362,524, and \$17,535,587, respectively, and we had an accumulated deficit of \$153,877,561 as of March 31, 2014 and \$145,778,547, \$101,895,712, and \$80,470,009, as of December 31, 2013, 2012, and 2011, 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 and our subsidiaries' success in developing and marketing or licensing 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 \$8,405,393, during the three months ended March 31, 2014, and \$26,609,423, \$18,116,688, and \$13,699,691 during the fiscal years ended December 31, 2013, 2012, and 2011, 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. See Note 8 to condensed consolidated interim financial statements.

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.

Asterias' operations will result in an increase in our operating expenses and losses on a consolidated basis

Asterias will use the stem cell assets that it has acquired from Geron for the research and development of products for regenerative medicine. Asterias' research and development efforts will involve substantial expense that will add to our losses on a consolidated basis for the near future.



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

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.

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.

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

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

We will increase of our investment in LifeMap Sciences to provide funding for the development of new software products

Our subsidiary LifeMap Sciences 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. We have agreed to invest at least \$5,000,000 in LifeMap Sciences to provide funding for the project, and unless additional financing can be obtained from third parties, we may need to increase our investment significantly during the next few calendar years to fund the development and commercialization of the planned products.

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.

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.

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

Hextend<sup>®</sup> is presently the only plasma expander product that we have on the market, and it is being sold only in the U.S. and South Korea. The royalty revenues that we have received from sales of Hextend<sup>®</sup> 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 bringing 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<sup>®</sup> 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<sup>®</sup>, an artificial plasma volume expander, and Hospira and Teva sell a generic equivalent of Hespan<sup>®</sup>. Hospira also markets Voluven<sup>®</sup>, 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.

Sales of Hextend<sup>®</sup> could be adversely affected by safety and use labeling changes required by the FDA

Sales of Hextend<sup>®</sup> could be adversely affected by certain safety labeling changes required by the FDA for the entire class of hydroxyethyl starch products, including Hextend<sup>®</sup>. 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<sup>®</sup>, increases the risk of mortality and renal injury requiring renal replacement therapy in critically ill adult patients, including patients with sepsis, and that Hextend<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> should be discontinued at the first sign of coagulopathy. The liver function of patients receiving hydroxyethyl starch products, including Hextend<sup>®</sup> should also be monitored. The approved revised label may adversely affect Hextend<sup>®</sup> sales since some users of plasma volume expanders might elect to abandon the



use of all hydroxyethyl starch products, including Hextend®.

12

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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 March 31, 2014, we had \$6,637,834 of cash and cash equivalents on hand. There can be no assurance that we or our subsidiaries will be able to raise 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.

The condition of certain 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 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 the cells Asterias plans to use are not sufficiently functional for its 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.

Asterias has assumed certain obligations and potential liabilities with regard to clinical trials conducted by Geron, and we do not yet know the scope of any resulting expense

Asterias has assumed Geron's obligations to obtain information and prepare reports about the health of patients who participated in clinical trials of Geron's GRNOPC1 cell replacement therapy for spinal cord damage and its GRNVAC1 immunological therapy for certain cancers. Although the future cost of patient health information gathering and reporting is not presently determinable, we do not expect that the cost will be material to our financial condition.

Asterias has also assumed any liabilities to those patients that might arise as result of any injuries they may have incurred as a result of their participation in the clinical trials. We are not aware of any claims by patients alleging injuries suffered as a result of the Geron clinical trials, but if any claims are made and if liability can be established, the amount of any liability that Asterias may incur, depending upon the nature and extent of any provable injuries incurred, could exceed any insurance coverage that we or Asterias 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 BioTime and its subsidiaries could have a material adverse effect on us.

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

We have made several strategic acquisitions during the past few years, including ESI in 2010, Glycosan BioSystems, Inc. and Cell Targeting, Inc. in 2011, and XenneX, Inc. in 2012. Asterias acquired Geron's stem cell related assets during 2013. 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.

14

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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 system failures

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

#### Risks Related to Our Industry

We will face certain risks arising from regulatory, legal, and economic factors that affect our business and the business of other 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 therapeutic or diagnostic 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;
- 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 NIH has adopted new guidelines for determining the eligibility of hES cell lines for use in federally funded research. The central focus of the proposed guidelines is to assure that hES cells used in federally funded research were derived from human embryos that were created for reproductive purposes, were no longer needed for this purpose, and were voluntarily donated for research purposes with the informed written consent of the donors. The hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research.

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

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

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

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

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

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

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

We have filed patent applications for technology that we have developed, and we have obtained licenses for a number of patent applications covering technology developed by others, that we believe will be useful in producing new products, and which we believe may be of commercial interest to other companies that may be willing to sublicense the technology for fees or royalty payments. In the future, we may also file 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 PanC-Dx™ as a cancer diagnostic test, based on the presence of certain genetic markers for a variety of cancers. Because PanC-Dx™ combines an innovative methodology with newly discovered compositions of matter, we are hopeful that this Supreme Court decision will not preclude the availability of patent protection for OncoCyte’s new product. However, like other developers of diagnostic products, we are evaluating this new Supreme Court decision and new guidelines issued by the United States Patent and Trademark Officer (the “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.

After March 16, 2013 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 will make available after March 16, 2013 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.

Our patents may not protect our products from competition

We or our subsidiaries have patents in the United States, Canada, the European Union countries, the United Kingdom, Australia, Israel, Russia, South Africa, India, China, South Korea, Japan, Hong Kong, and Singapore, and have filed patent applications in other foreign countries for our plasma volume expander, stem cell products, HyStem® and other hydrogels, certain genes related to the development of cancer, and other technologies.



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

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

In addition to interference proceedings, the 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. As of September 16, 2012 our patents may be subject to inter partes review (replacing the inter partes reexamination proceeding), a proceeding in which a third party can challenge the validity of one of our patents.

We may be subject to patent infringement claims that could be costly to defend, which 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.

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

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

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

Success in selling our pharmaceutical and cell-based products and medical devices may depend in part on the extent to which health insurance companies, HMOs, and government health administration authorities such as Medicare and Medicaid will pay for the cost of the products and related treatment. Presently, most health insurance plans and HMOs will pay for Hextend® when it is used in a surgical procedure that is covered by the plan. However, until we actually introduce a new product into the medical marketplace, we will not know with certainty whether adequate health insurance, HMO, and government coverage will be available to permit the product to be sold at a price high enough for us to generate a profit. In some foreign countries, pricing or profitability of health care products is subject

to government control, which may result in low prices for our products. In the United States, there have been a number of federal and state proposals to implement similar government controls, and new proposals are likely to be made in the future.

19

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## Risks Related to our Dependence on Third Parties

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.

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

There is a risk that a collaboration partner might fail to perform its obligations under the collaborative arrangements or may be slow in performing its obligations. In addition, a collaboration partner may experience financial difficulties at any time that could prevent it from having available funds to contribute to the collaboration. If a collaboration partner fails to conduct its product development, commercialization, regulatory compliance, sales and marketing or distribution activities successfully and in a timely manner, or if it terminates or materially modifies its agreements with us, the development and commercialization of one or more product candidates could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue such development and commercialization on our own.

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

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

Health for the sale of Hextend<sup>®</sup>. 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.

20

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If we market products through arrangements with third parties, we may pay sales commissions to sales representatives or we may sell or consign products to distributors at wholesale prices. As a result, our gross profit from product sales may be lower than it would be if we were to sell our products directly to end users at retail prices through our own sales force. There can be no assurance we will be able to negotiate distribution or sales agreements with third parties on favorable terms to justify our investment in our products or achieve sufficient revenues to support our operations.

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

We could be liable to indemnify Geron from certain liabilities

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 earliest to occur of the date on which all of the BioTime warrants have either expired, or been exercised, cancelled or sold.

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 Pertaining to Our Common Shares and Warrants

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

### You may experience immediate and substantial dilution

The offering price per share in this offering may exceed the net tangible book value per share of our common shares outstanding prior to this offering. Assuming that an aggregate of 8,902,077 common shares included in this prospectus are sold at a price of \$2.85 per share, the last reported sale price of our common shares on the NYSE MKT on June 6, 2014, for aggregate gross proceeds of \$25,370,919, you will experience immediate dilution of \$2.48 per share, representing the difference between our as adjusted net tangible book value per share as of March 31, 2014 after giving effect to this offering and the assumed offering price. The exercise of outstanding stock options and certain warrants not included in this prospectus may result in further dilution of your investment. See the section entitled "DILUTION" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

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

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

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

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

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

Changes in the price of our common shares will affect the price at which our warrants may trade.

There has previously been no public market for the Contribution Warrants and there is no assurance that a public market for the Contribution Warrants will develop

Although we have applied to list the Contribution Warrants on the NYSE MKT where our common shares are listed there is no assurance that the Contribution Warrants will be approved for listing. Even if the Contribution Warrants are listed for trading on the NYSE MKT, there is no way of predicting whether an active market for trading in the Contribution Warrants will develop. The absence of an active public market would make it difficult for Contribution Warrant holders to sell their Contribution Warrants and would adversely affect the value of the Contribution Warrants.

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

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



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

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

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

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

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

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our present shareholders. We are currently authorized to issue an aggregate of 127,000,000 shares of capital stock consisting of 125,000,000 common shares and 2,000,000 "blank check" preferred shares. As of June 6, 2014, there were 72,149,329 common shares and 70,000 shares of Series A Convertible Preferred Stock, convertible into 875,000 common shares, outstanding, 5,523,592 common shares reserved for issuance upon the exercise of outstanding options under our employee stock option plans; and 9,195,002 shares reserved for issuance upon the exercise of common share purchase warrants, including the 8,000,000 Contribution 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 and Contribution Warrants.

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

ownership of the subsidiaries.

23

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The market price of our common shares and Contribution Warrants could be impacted by the sale of the common shares included in this prospectus, and the distribution or exercise of the Contribution Warrants

Under the Asset Contribution Agreement, we issued to Asterias 8,902,077 common shares which are included in this prospectus. Asterias may sell the common shares that they receive from us. Sales those common shares by Asterias may take place from time to time on the NYSE MKT and may create downward pressure on the trading price of our common shares and Contribution Warrants.

Asterias plans to distribute the 8,000,000 Contribution Warrants to the future holders of Asterias Series A Shares. The Contribution Warrants will be exercisable for a period of five years at an exercise price of \$5.00 per share, subject to adjustment for certain stock splits, reverse stock splits, stock dividends, recapitalizations and other transactions. The Investor Warrants will be exercisable for a period of three years at an exercise price of \$5.00 per share, subject to adjustment for certain stock splits, reverse stock splits, stock dividends, recapitalizations and other transactions. During the period that the Contribution Warrants and the Investor Warrants are outstanding, the actual or potential exercise of those warrants and sale of the underlying common shares may create downward pressure on the trading price of our common shares and Contribution Warrants.

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

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

The Contribution Warrants cannot be exercised unless a registration statement is in effect under federal and state securities laws

A registration statement under the Securities Act must be in effect in order for holders of Contribution Warrants to exercise those warrants. This means that we will have to periodically update our registration statement and prospectus by filing post-effective amendments and by filing our annual report on Form 10-K, our quarterly reports on Form 10-Q, and current reports on Form 8-K as required under the Exchange Act. We intend to use our best efforts to keep our registration statement effective. However, if we are unable to do so for any reason, Contribution Warrant holders would not be able to exercise their Contribution Warrants, even if the market price of our common shares was then greater than the exercise price. Unless our common shares remain listed on the NYSE MKT or another national securities exchange, most states will also require us to obtain a permit, issued through an application for registration or qualification, and to maintain that permit in effect in order for Contribution Warrant holders in the state to exercise their Contribution Warrants.

## USE OF PROCEEDS

We will receive the exercise price of the Contribution Warrants if and when those warrants are exercised. If all of the Contribution Warrants are exercised, we will receive \$40,000,000. We intend to use the net proceeds we may receive from exercise of the Contribution Warrants for general corporate purposes, including, without limitation, working capital, capital expenditures, research and development expenditures, regulatory affairs expenditures, and clinical trial expenditures. Our management will have broad discretion in the application of the net proceeds from the exercise of

the Contribution Warrants.

24

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Pending the application of the net proceeds from the exercise of the Contribution Warrants, we expect to invest the proceeds in investment grade, interest bearing securities.

Asterias may sell from time to time the 8,902,077 common shares it received from us to finance its operations. The net proceeds from the sale of those common shares by Asterias will be used in its operations for general corporate purposes, including, without limitation, working capital, capital expenditures, research and development expenditures, and to finance clinical trials of any products that it might develop. The amount of net proceeds that may become available to Asterias from time to time cannot presently be determined and will depend upon the prices at which Asterias is able to sell its BioTime common shares. Until used, the net proceeds received by Asterias from the sale of its BioTime common shares will be invested in certificates of deposit, United States government securities, or other high quality, short-term, interest-bearing investments. See "PLAN OF DISTRIBUTION."

## DILUTION

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

If you purchase our common shares in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common shares after this offering. We calculate net tangible book value per share by dividing our net tangible assets (tangible assets less total liabilities) by the number of our common shares issued and outstanding as of March 31, 2014.

Our net tangible book value at March 31, 2014 was \$524,134 or \$0.01 per share. After giving effect to the sale of 8,902,077 of our common shares by Asterias at an assumed offering price of \$2.85 per share, the last reported price of our common stock on NYSE MKT on June 6, 2014, and after deducting commissions and estimated aggregate offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2014 would have been approximately \$25,053,926, or \$0.37 per common share. This represents an immediate increase in the net tangible book value of \$0.01 per share to our existing shareholders and an immediate dilution in net tangible book value of \$2.48 per share to new investors.

The following tables illustrate per share dilution:

Assumed public offering price per share	\$2.85
Net tangible book value per share as of March 31, 2014	\$0.01
Increase in net tangible book value per share attributable to this offering	\$0.36
Pro forma as adjusted net tangible book value per share as of March 31, 2014, after giving effect to this offering	\$0.37
Dilution per share to new investors purchasing shares in this offering	\$2.48

The table above assumes for illustrative purposes that all 8,902,077 common shares are sold at a price of \$2.85 per share, the last reported sale price of our common shares on the NYSE MKT on June 6, 2014, for aggregate gross proceeds of \$25,370,919 rather than at the price used to determine the value of the common shares we contributed to Asterias under the Asset Contribution Agreement. The shares will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$2.85 per share shown in the table above, assuming all of our common stock in the aggregate of 8,902,077 is sold at that price, would increase our pro forma as adjusted net tangible book value per share after the offering to \$0.50 per share and would increase the dilution in net tangible book value per share to new investors in this offering by \$0.49 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$2.85 per share shown in the table above, assuming all of our common stock in the aggregate of 8,902,077 is sold at that price, would decrease our pro forma as

adjusted net tangible book value per share after the offering to \$0.24 per share and would decrease the dilution in net tangible book value per share to new investors in this offering by \$0.23 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

25

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The above discussion and table are based on 59,071,192 common shares issued and outstanding as of March 31, 2014, and excludes the following:

warrants to purchase 1,751,615 common shares at a weighted average exercise price of \$6.59 per share outstanding at March 31, 2014.

options under our 2002 Stock Option Plan and under our 2012 Equity Incentive Plan to purchase 5,491,301 common shares, with a weighted average exercise price of \$2.86 per share, outstanding on March 31, 2014.

8,000,000 common shares issuable upon exercise of the Contribution Warrants at an exercise price of \$5.00 per share.

To the extent that outstanding options or warrants are exercised, or other shares are issued, investors purchasing shares in this offering could experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

#### MARKET FOR OUR COMMON EQUITY

Our common shares are traded on the NYSE MKT 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, 2012 and 2013 and for the three months ended March 31, 2014 as reported by the NYSE MKT:

Quarter Ended	High	Low
March 31, 2012	6.12	4.41
June 30, 2012	4.79	3.47
September 30, 2012	4.98	3.81
December 31, 2012	4.40	2.91
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

As of March 20, 2014, there were 15,406 holders of our common shares based on the share position listing.

There has previously been no public market for the Contribution Warrants and there is no assurance that a public market for the Contribution Warrants will develop. Although we have applied to list the Contribution Warrants on the NYSE MKT where our common shares are listed there is no assurance that the Contribution Warrants will be approved for listing. Even if the Contribution Warrants are listed for trading on the NYSE MKT, there is no way of predicting whether an active market for trading in the Contribution Warrants will develop.

#### Dividend Policy

We have never paid cash dividends on our common shares and, except for semi-annual dividends on our Series A Convertible Preferred Stock, we do not anticipate paying cash dividends on our common shares in the foreseeable future, but intend to retain our capital resources for reinvestment in our business. Any future determination to pay cash dividends on our capital stock, other than our Series A Convertible Preferred Stock, 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.



THE ASSET CONTRIBUTION AGREEMENT

Explanatory Note Regarding the Asset Contribution Agreement

The following summary of the Asset Contribution Agreement may not contain all of the information that is important to you and is qualified in its entirety by reference to the full text of the Asset Contribution Agreement which has been previously filed with the SEC as Exhibit 2.1 to our Form 8-K dated January 8, 2013 and is incorporated herein by reference. Please read the full text of the Asset Contribution Agreement. The representations, warranties and covenants contained in the Asset Contribution Agreement were made only for purposes of that agreement and as of specific dates, were made solely for the benefit of the parties to the Asset Contribution Agreement and may be intended not as statements of fact, but rather as a way of allocating the risk among the parties if those statements prove to be inaccurate. In addition, such representations, warranties and covenants may have been qualified by certain confidential disclosure schedules prepared by the parties to the Asset Contribution Agreement, and not reflected in the text of the Asset Contribution Agreement, and may apply standards of materiality in a way that is different from what may be viewed as material by shareholders of, or other investors in, BioTime. Schedules to the Asset Contribution Agreement have been omitted in our Form 8-K filing. We agree to furnish supplementally a copy of any omitted schedule to the SEC upon request. Investors are not third-party beneficiaries under the Asset Contribution Agreement and should not rely on the representations, warranties and covenants or any descriptions thereof as characterizations of the actual state of facts or condition of BioTime, Asterias or Geron, or any of their respective subsidiaries or affiliates.

On January 4, 2013, we entered into the Asset Contribution Agreement with Asterias and Geron pursuant to which, on October 1, 2013, Asterias acquired the stem cell assets of Geron in exchange for 6,537,779 Asterias Series A Shares and the assumption of the Assumed Geron Liabilities, and Asterias acquired the Contribution Shares, Contribution Warrants, and certain other assets from us in exchange for 21,773,340 Asterias Series B Shares and warrants to purchase 3,150,000 additional Asterias Series B Shares.

In the Asset Contribution, Asterias received the following assets from Geron and BioTime:

From Geron:

- certain patents and patent applications and all related active prosecution cases, trade secrets, know-how and certain other intellectual property rights, and all of Geron's goodwill with respect to the technology of Geron directly related to the research, development and commercialization of certain products and know-how related to hES cells;
- certain biological materials and reagents (including master and working cell banks, original and seed banks, and research, pilot and GMP grade lots and finished product);
- certain laboratory equipment;
- certain contracts;
- certain books, records, lab notebooks, clinical trial documentation, files and data;
- certain regulatory filings, including the investigational new drug applications filed with the FDA for the Clinical Trials; and
- certain abandoned or inactive patents and abandoned or inactive patent applications.

We refer to the assets to be contributed to Asterias by Geron as the “Contributed Geron Assets.” In addition, Asterias received from Geron the Telomerase Sublicense entitling Asterias to use the inventions described in the sublicensed patents in the development of certain immunological treatments for cancer. Under the Telomerase Sublicense, Asterias paid Geron an up-front license fee, and will pay Geron a small annual license maintenance fee, and a small royalty on sales of any products that Asterias may develop and commercialize using the sublicensed patents.

From BioTime:

8,902,077 Contribution Shares, which for purposes of the Asset Contribution Agreement were valued at \$30,000,000 or \$3.37 per share based upon the Average Price;

the Contribution Warrants to subscribe for and purchase 8,000,000 additional BioTime common shares;

Cancellation of the \$5,000,000 principal balance of a promissory note payable to BioTime for cash advanced to Asterias or paid for Asterias’ account;

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

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

the BioTime Stem Cell Assets.

Cash Contribution by Romulus:

Romulus entered into a Stock and Warrant Purchase Agreement with Asterias pursuant to which Romulus contributed \$5,000,000 in cash to Asterias for 2,136,000 Asterias Series B Shares and warrants to purchase 350,000 additional Asterias Series B Shares. That investment was made on October 1, 2013 in conjunction with the completion of the Asset Contribution.

Ownership of Asterias following the Asset Contribution

Upon completion of the Asset Contribution on October 1, 2013, Asterias issued to Geron, BioTime, and Romulus the following Asterias securities:

To Geron, 6,537,779 Asterias Series A Shares;

To BioTime, 21,773,340 Asterias Series B Shares, and warrants to purchase 3,150,000 Asterias Series B Shares, exercisable for a period of three years at an exercise price of \$5.00 per share; and

To Romulus, 2,136,000 Asterias Series B Shares, and warrants to purchase 350,000 additional Asterias Series B Shares, exercisable for a period of three years after the date of issue at an exercise price of \$5.00 per share.

Upon completion of the Asset Contribution we held approximately 71.6% of the Asterias common stock as a whole, Geron held 100% of the Asterias Series A Shares and approximately 21.4% of the Asterias common stock as a whole, and Romulus held approximately 7% of the Asterias common stock as a whole. The Asterias warrants that we and Romulus received will enable us and Romulus to increase our collective ownership in Asterias by approximately 2.2%, which would reduce Geron’s ownership in us to approximately 19.2%.

The Asterias Series A Shares and Asterias Series B Shares are identical in substantially all respects and will vote together as a single class, without distinction as to series on all matters except as may otherwise be required by Delaware law. The two significant differences between the Asterias Series A Shares and Asterias Series B shares are:

Asterias may declare and pay dividends or other distributions on Asterias Series A Shares without paying a corresponding dividend or distribution on the Asterias Series B Shares. This difference in dividend and distribution rights will allow Asterias make the Contribution Warrants Distribution to the holders of the Asterias Series A Shares.

The Asterias Series B Shares may be converted into Asterias Series A Shares, at Asterias' election, at any time by resolution of Asterias' Board of Directors after Asterias completes the Contribution Warrants Distribution. Each Asterias Series B Share will be convertible into one Asterias Series A Share.

#### Assumed Liabilities

Asterias has assumed all obligations and liabilities of Geron and its affiliates relating to:

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

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

certain patent interference proceedings that Asterias subsequently settled through a cross-licensing arrangement; and

the Clinical Trials.

#### Royalty Agreement

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

#### Contribution Expenses; Taxes

Asterias will bear and pay, and reimburse Geron and its affiliates for, any reasonable fees and expenses relating to and that may be payable in connection with the assignment of the Geron patents and taxes that may become payable in connection with the contribution of assets by Geron to Asterias.

#### Patent Expense Reimbursement

Under the Asset Contribution Agreement Asterias reimbursed Geron for the fees and costs, including reasonable attorneys fees, incurred from July 4, 2013 through the closing of the Asset Contribution for prosecuting and maintaining patent applications and patents included in the Contributed Geron Assets.

#### Expense Reimbursement

We paid \$750,000 to Geron upon completion of the Asset Contribution, as partial reimbursement of fees and expenses incurred by Geron's advisors in connection with the Asset Contribution Agreement and the Asset Contribution.



## The Series A Distribution

In the Asset Contribution Agreement, Geron has agreed to distribute to its stockholders, on a pro rata basis, the Asterias Series A Shares it received in the Asset Contribution. Geron is required to make the Series A Distribution as soon as practicable following the closing of the Asset Contribution, subject to applicable legal requirements and certain other limitations. Under the Asset Contribution Agreement, fractional shares will not be distributed in the Series A Distribution, and instead will be aggregated and sold for cash and the net cash proceeds of the sale will be distributed ratably to Geron stockholders who would otherwise be entitled to receive fractional shares. Also, in lieu of distributing the Asterias Series A Shares in certain Excluded Jurisdictions, the Asterias Series A Shares that otherwise would have to be distributed to Geron stockholders who reside in those Excluded Jurisdictions will be sold for cash and the net cash proceeds will be distributed ratably to those stockholders.

## The Contribution Warrants Distribution

As soon as practicable after Geron notifies Asterias of the completion of the Series A Distribution, and to the extent permitted by applicable legal requirements, Asterias will distribute to the holders of the Asterias Series A Shares, on a pro rata basis, the 8,000,000 Contribution Warrants. As a result, Asterias will not derive any future economic value from the Contribution Warrants and instead the value of the Contribution Warrants will benefit the holders of Asterias Series A Shares who receive the Contribution Warrants.

## Post-Closing Obligations Relating to Registration Statements

The Asset Contribution Agreement imposes a number of post-closing obligations on us, with respect to the Contribution Warrants and the underlying common shares, and on Asterias with respect to the Asterias Series A Shares, including requirements relating to:

- keeping or making effective this prospectus and the registration statement of which it is a part (the “BioTime Registration Statement”), and Asterias’ prospectus (the “Asterias Prospectus”) and the registration statement of which it is a part (the “Asterias Registration Statement”), pertaining to the Series A Distribution, and qualification or exemption of securities under securities laws and blue sky laws;

- supplementing or amending the BioTime Registration Statement, this prospectus, the Asterias Registration Statement and the Asterias Prospectus;

- compliance with applicable legal requirements; and

- notice to Geron of certain matters.

## Indemnification and Insurance

### Distributions Indemnity; Insurance

We and Asterias have agreed to jointly and severally indemnify Geron and certain of its affiliates from certain losses and liabilities, including any losses relating to certain claims that could arise as a result of any untrue statement or alleged untrue statement of material fact in, or omission or alleged omission to state any material fact required in order to make the statements not misleading from this prospectus and the BioTime Registration Statement, from the Asterias Registration Statement and the Asterias Prospectus, and/or from other distributions of securities by Asterias to the holders of Asterias Series A Shares. These indemnification obligations would apply to any claims relating to the Series A Distribution, the Contribution Warrants Distribution, and/or other distributions of securities by Asterias to the holders of Asterias Series A Shares within one year following the closing under the Asset Contribution Agreement, provided that the claims arise on or before the fifth anniversary of the date on which all of the

Contribution Warrants have either expired or been exercised, cancelled or sold. We refer to such indemnification obligations as the "Distributions Indemnity."

30

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As required by the Asset Contribution Agreement, we have procured, at our cost and expense, a prospective liability insurance policy (the "Insurance Policy") to provide \$10,000,000 of coverage for our indemnification obligations under the Distribution Indemnity. The Insurance Policy must be kept in place for the period beginning on the earliest effect date of the BioTime Registration Statement and/or the Asterias Registration Statement, and ending on the fifth anniversary of that effective date.

#### Other Indemnification Obligations

Separate from the Distributions Indemnity, we and Asterias have agreed to indemnify Geron and its current and future affiliates and Control Persons (as defined below) of Geron, and each of their respective successors and assigns, and Geron has agreed to indemnify us and Asterias and our and Asterias' respective current and future affiliates, Control Persons of each of us and Asterias, and each of their respective successors and assigns, from and against "damages" arising from any inaccuracy or breach of the indemnifying party's representations and warranties, or any breach of any covenant by an indemnifying party, under the Asset Contribution Agreement. For the purpose of these indemnification obligations, "damages" are limited to any documented, out-of-pocket loss, damage, judgment award, fee (including any legal fee, expert fee, accounting fee or advisory fee) or expenses (regardless of whether or not the damages relate to a third party claim), but excluding any special, indirect or consequential damages. "Control Persons" refers to any person who controls a party within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act.

In addition, subject to certain limitations, from and after the closing of the Asset Contribution, Geron has agreed to indemnify us and Asterias from liabilities relating to the Contributed Geron Assets, and from encumbrances upon the Contributed Geon Assets, other than the Assumed Geron Liabilities. Asterias has agreed to indemnify Geron for the Assumed Geron Liabilities.

The maximum damages recoverable from us and Asterias by Geron (or by us and Asterias from Geron) for indemnifiable losses is limited to \$2,000,000 in the aggregate, and recovery of damages is subject to a \$50,000 deductible, except that the \$2,000,000 limit and the \$50,000 deductible do not apply (a) in the case of fraud; (b) in the case of covenants of a party that must be performed following the closing under the Asset Contribution Agreement; and (c) with respect to liabilities to the extent related to, and encumbrances upon, the Contributed Geron Assets or the Assumed Geron Liabilities.

#### Exclusive Remedy

Except with respect to the Distributions Indemnity or claims against an indemnitor for fraud, and subject to any injunction or equitable remedies, from and after the closing under the Asset Contribution Agreement the indemnification provisions are a party's exclusive remedy and cause of action against an indemnifying party with respect to any matter arising out of or in connection with the Asset Contribution Agreement

#### 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 72,149,329 shares were outstanding at June 6, 2014.

As of March 20, 2014, there were 15,406 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 the holder 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, LLC, 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.

As of March 31, 2014, we had 70,000 shares of Series A Convertible Preferred Stock (“Series A Preferred Stock”) outstanding. The Series A Preferred Stock carries a cumulative annual 3% preferred dividend or \$1.50 per share, in preference to BioTime common shares. Each share of Series A Preferred Stock is convertible, at the election of the holder, into BioTime common shares at a conversion price of \$4.00 per share, a current conversion ratio of 12.5 common shares for each share of Series A Preferred Stock. In addition to the preferred dividend, the Series A Preferred Stock will be entitled to participate with BioTime common shares in any dividends or distributions on common shares (other than dividends and distributions of common shares resulting in an adjustment of the conversion price) as if all shares of Series A Preferred Stock were then converted into common shares.

All outstanding Series A Preferred Stock will automatically be converted into common shares on March 4, 2019, or if holders of a majority of the outstanding shares of Series A Preferred Stock, voting as a class, approve or consent to a conversion. The conversion price is subject to prorata adjustment in the event of a subdivision or reclassification of the common shares into a greater number of shares, a stock dividend paid in common shares, or a stock combination or reclassification of the common shares into a smaller number of shares.

The Series A Preferred Stock will be entitled to vote with common shares on all matters submitted to holders of common shares for approval. Each share of Series A Preferred Stock will be entitled to a number of votes equal to the number of common shares into which it could then be converted. The Series A Preferred Stock will also vote as a separate class on certain matters affecting those shares.

In the event of a liquidation or dissolution of BioTime, holders of Series A Preferred Stock will be entitled to receive payment of any accrued but unpaid preferred dividends before any assets may be distributed to holders of common shares. After payment of the accrued dividends, the Series A Preferred Stock will participate with the common shares in the distribution of any assets available to shareholders, as if the Series A Preferred Stock was then converted into common shares.



## Contribution Warrants

We issued 8,000,000 Contribution Warrants to Asterias under the Asset Contribution Agreement. Each Contribution Warrant entitles the holder to purchase one common share at a price of \$5.00 per share. Asterias has agreed to make the Contribution Warrants Distribution as soon as practicable after Geron notifies Asterias of the completion of the Series A Distribution. Geron has agreed to make the Series A Distribution as soon as practicable after the closing of the Asset Contribution.

### How to Exercise Contribution Warrants

Contribution Warrants may be exercised in whole or in part by presentation of a warrant certificate to the Warrant Agent and payment of the exercise price. The purchase form on the reverse side of the Contribution Warrants must be completed and signed by the warrant holder, and if the shares being purchased are to be issued to a person other than the warrant holder, the warrant holder's signature must be guaranteed by a financial institution that is a participant in a recognized signature guarantee program. Payment of the exercise price of the Contribution Warrants must be made by personal check, bank cashier's check, or wire transfer.

Contribution Warrant holders who desire to exercise their Contribution Warrants should deliver their properly completed and signed warrant certificates to the Warrant Agent, American Stock Transfer & Trust Company, by hand, mail, express mail, or overnight courier at the following address:

American Stock Transfer & Trust Company  
Attn: Reorganization Department  
6201 15th Avenue  
Brooklyn, New York 11219

We suggest that you send funds for the payment of the warrant exercise price by wire transfer to American Stock Transfer & Trust Company, Warrant Agent, JP Morgan Chase Bank WIRE CLEARING ACCOUNT ABA #021000021, Account 530354616, Attention: Reorg. Dept. Before wiring funds, you should call the Warrant Agent at 1-800-937-5449 to confirm wiring instructions.

So long as the transfer agent for our common shares is participating in The Depository Trust Company ("DTC") Fast Automated Securities Transfer Program, upon the request of the holder exercising Contribution Warrants, the Warrant Agent will, in lieu of delivering a certificate or certificates for common shares issuable upon exercise of a Contribution Warrant, credit the aggregate number of common shares to which the Contribution Warrant holder is entitled pursuant to such exercise to the holder's or its designee's balance account with DTC through its Deposit/Withdrawal At Custodian system.

A warrant holder may not rescind the exercise of their Contribution Warrants.

### Expiration Date of Contribution Warrants

The Contribution Warrants will expire at 5:00 p.m. New York time on October 1, 2018 and may not be exercised after that date.

### Prohibition on Below Market Exercise of Contribution Warrants

So long as our common shares are publicly traded, the Contribution Warrants may not be exercised on any day on which the closing price of our common shares for the day is lower than the exercise price. The closing price of the common shares for each trading day shall be the last reported sales price regular way or, in case no such reported sale takes place on such day, the average of the closing bid and asked prices regular way for such day, in each case on the

principal national securities exchange on which the common shares are listed or admitted to trading or, if not so listed or admitted to trading, the last sale price of the common shares on the OTC Bulletin Board, or any comparable system. The closing price of the common shares for any day that is not a trading day shall be the closing price for the most recent trading day.

33

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### Adjustment of the Number of Shares and Exercise Price

The number of common shares issuable upon the exercise of the Contribution Warrants, and the exercise price per share, will be proportionally adjusted in the event of a stock split, stock dividend, combination, reclassification of our common shares or similar recapitalization.

The number of common shares issuable upon the exercise of the Contribution Warrants, and exercise price per share will also be adjusted if we issue rights, options or warrants to all holders of our outstanding common shares, without any charge to those holders, entitling them to subscribe for or purchase common shares at a price per share which is lower at the record date than the then current market price per share of our common shares. In that case, the number of common shares thereafter purchasable upon the exercise of each Contribution Warrant will be determined by multiplying the number of common shares otherwise issuable upon exercise of each Contribution Warrant by a fraction, the numerator of which will be the number of common shares outstanding on the date of issuance of such rights, options or warrants plus the number of additional common shares offered for subscription or purchase in connection with the rights, options or warrants issued without charge, and the denominator of which will be the number of common shares outstanding on the date of issuance of those rights, options or warrants plus the number of common shares which the aggregate exercise price for the total number of common shares issuable upon exercise of those rights, options or warrants would purchase at the current market price per share at the record date.

If we distribute to all holders of our common shares (including any distribution made in connection with a merger in which we are the surviving corporation) evidences of our indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus or stock dividends) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase common shares (excluding those referred to in the preceding paragraph), then in each case the number of common shares purchasable upon the exercise of each Contribution Warrant shall be determined by multiplying the number of common shares theretofore purchasable upon the exercise of each Contribution Warrant by a fraction, the numerator of which will be the then current market price per common share on the date of such distribution, and the denominator of which will be the then current market price per common share, less the then fair value (as reasonably determined by our Board of Directors) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one common share.

Whenever the number of common shares purchasable upon the exercise of the Contribution Warrants is adjusted, the price payable upon exercise of the Contribution Warrants will be adjusted by multiplying the exercise price immediately prior to the adjustment by a fraction, the numerator of which will be the number of common shares purchasable upon the exercise of each Contribution Warrant immediately prior to the adjustment, and the denominator of which will be the number of common shares purchasable immediately thereafter.

Upon the expiration of any rights, options, warrants or conversion or exchange privileges that result in an adjustment of the number of common shares issuable upon the exercise of the Contribution Warrants and the exercise price, the number of common shares purchasable upon the exercise of the Contribution Warrants and the exercise price will be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only common shares, if any, so issued were the shares actually issued or sold upon the exercise of the rights, options, warrants or conversion or exchange rights, and (B) those shares were issued or sold for the consideration actually received by us upon such exercise plus the aggregate consideration, if any, actually received by us for the issuance, sale or grant of all of those rights, options, warrants or conversion or exchange rights whether or not exercised.

## Preservation of Purchase Rights Upon Merger, Consolidation, and Certain Other Transactions

The Warrant Agreement governing the Contribution Warrants provides that if we consolidate with or merge into another corporation, or if we sell, transfer or lease to another corporation all or substantially all our assets, we or our successor or the corporation that purchases us or our assets shall execute an agreement providing that each Contribution Warrant holder shall have the right thereafter, upon such warrant holder's election, either (i) upon payment of the exercise price of the Contribution Warrants in effect immediately prior to the transaction, to purchase upon exercise of their Contribution Warrant the "Sale Consideration," or (ii) to receive, in cancellation of their Contribution Warrants (and in lieu of paying the exercise price and exercising their Contribution Warrants), the Sale Consideration less a portion having a fair market value (as reasonably determined by us) equal to the exercise price; provided, however, that no adjustment in respect of dividends, interest or other income on or from such shares or other securities and property shall be made during the term of a Contribution Warrant or upon the exercise of a Contribution Warrant. The "Sale Consideration" means the kind and amount of shares and other securities and property (including cash) which the Contribution Warrant holder would have owned or have been entitled to receive after the consolidation, merger, sale, transfer or lease had they exercised their Contribution Warrants immediately prior to the transaction.

### No Rights as Shareholders.

The Contribution Warrants do not confer upon the warrant holders the right to vote or to receive dividends or to consent or to receive notice as shareholders in respect of any meeting of shareholders for the election of directors or any other matter, or any other rights whatsoever as our shareholders.

### Notices to Warrant Holders

Under the Warrant Agreement governing the Contribution Warrants, we will give Contribution Warrant holders notice of any of the following actions that we plan to take: (a) a declaration of any dividend payable in any securities upon our common shares, or any distribution to holders of common shares, other than a regular cash dividend, as such dividend may be increased from time to time, or a dividend payable in common shares; or (b) an offer to the holders of common shares on a pro rata basis any cash, additional common shares or other securities to be issued by us, or any right to subscribe for or purchase any of our securities; or (c) a dissolution, liquidation or winding up of our business other than in connection with a consolidation, merger, sale, transfer or lease of all or substantially all of our property, assets, and business as an entirety. We will give Contribution Warrant holders the notice at least 10 days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the shareholders entitled to such dividend, distribution, or subscription rights or for the determination of shareholders entitled to vote on such proposed dissolution, liquidation or winding up or the date of expiration of the offer. The notice shall specify such record date or the date of closing the transfer books or the date of expiration, as the case may be. Any failure on our part to publish or mail a notice, or any failure of a Contribution Warrant holder to receive a notice, or any defect in a notice or in the publication or mailing of a notice shall not affect the validity of any action in connection with such dividend, distribution or subscription rights, or such proposed dissolution, liquidation or winding up, or offer.

### Amendment of Contribution Warrants

The Warrant Agreement defining the terms of the Contribution Warrants may be amended, supplemented or modified only by an instrument in writing signed by us and the Warrant Agent and with the affirmative vote or written consent of holders of record of a majority of the Contribution Warrants then outstanding; except that such vote or consent shall not be required for any amendment, supplement or modification that reduces the exercise price or extends the expiration date of the Contribution Warrants. In determining whether the holders of the required number of outstanding Contribution Warrants have approved any amendment, supplement or modification to the Warrant Agreement, Contribution Warrants owned by us or any of our controlled affiliates, if any, shall be disregarded and deemed not to be outstanding. The prior written consent of Geron shall also be required for any amendment,

supplement or modification of the Warrant Agreement, any Contribution Warrant that: (i) extends or would have the effect of extending the expiration date; or (ii) adversely affects the rights of Geron under the Warrant Agreement.

The forgoing description of the Contribution Warrants is only a summary and does purport to be a complete description of all of the terms of the Contribution Warrants, which are contained in a Warrant Agreement. The Warrant Agreement has been filed as an exhibit to the registration statement of which this prospectus is a part. The foregoing summary is qualified in all respects by the terms of the Warrant Agreement which are incorporated herein by reference.

35

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## Warrants

In addition to the Contribution Warrants offered by this prospectus, at June 6, 2014 we had issued and outstanding 1,195,002 other warrants that have exercise prices and expiration dates shown in the following table, and other terms that differ from the Contribution Warrants.

Number of Warrants	Shares Issuable <sup>(1)</sup>	Exercise Price <sup>(1)</sup>	Expiration Date
649,998	649,998	\$ 5.00	January 13, 2016
545,004	545,004	\$ 5.00	June 5, 2016

(1) The number of common shares and exercise price will be proportionally adjusted in the event of a stock split, stock dividend, combination, or similar recapitalization of the common shares, and upon the occurrence of certain other transactions that could also result in an adjustment of the number of common shares issuable under, and the exercise price of, the Contribution Warrants.

## PLAN OF DISTRIBUTION

## Distribution of Contribution Warrants

Asterias has agreed to distribute 8,000,000 Contribution Warrants to the holders of Asterias Series A Shares as soon as practicable after Geron notifies Asterias of the completion of the Series A Distribution. Geron has agreed to complete the Series A Distribution as soon as practicable after the closing of the Asset Contribution.

A Geron stockholder or other holder of Asterias Series A Shares who receives Contribution Warrants in the Contribution Warrant Distribution will need to allocate a portion of their basis in their Asterias Series A Shares to the Contribution Warrants they receive. The amount of basis allocable to the Contribution Warrants will be the fair market value of the Contribution Warrants on the date of the Series A Distribution.

Asterias will be deemed an "underwriter" as defined in the Securities Act with respect to the Contribution Warrants Distribution.

## Sale of Shares by Asterias in At-the-Market and Other Transactions

We issued 8,902,077 common shares to Asterias under the Asset Contribution Agreement. Asterias may sell its BioTime 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 through one more of the foregoing transactions. Asterias expects to sell its BioTime common shares in "at-the-market" transactions through Cantor Fitzgerald & Co. or such other broker-dealer as BioTime may designate. Asterias may also sell its BioTime common shares by any other method permitted by law, including in privately negotiated transactions.

Asterias will bear all broker-dealer commissions payable in connection with the sale of its BioTime common shares. Broker-dealers who acquire BioTime common shares from Asterias 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. Broker-dealers engaged by Asterias may arrange for other brokers-dealers to participate in sales. Broker-dealers may

receive commissions or discounts from Asterias (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated.

36

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To the extent that Asterias offers or sells BioTime common shares pursuant to this prospectus in “at-the-market” transactions, such offers and sales will be deemed a primary “at-the market” offering by BioTime in which Asterias, as a statutory “underwriter” as defined in the Securities Act, will offer the BioTime common shares to the public through a registered broker dealer. Any broker-dealer who participates in the sale of BioTime common shares by Asterias will also be an “underwriter” 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, will be deemed to be underwriting discounts and commissions under the Securities Act.

#### Asterias to Refrain From Certain Market Activities

During the time that Asterias may be engaged in a distribution of its BioTime common shares it will (a) not engage in any stabilization activity in connection with our securities, (b) cause to be furnished to each broker through whom the 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.

#### LEGAL MATTERS

The validity of the common shares and the Contribution Warrants included in this prospectus will be passed upon for BioTime by Thompson, Welch, Soroko & Gilbert LLP, San Francisco and San Rafael, California. A member of Thompson, Welch, Soroko & Gilbert LLP holds 10,000 BioTime common shares.

#### EXPERTS

The financial statements incorporated in this prospectus by reference from BioTime’s Annual Report on Form 10-K as of December 31, 2013 and 2012, and for each of the years in the three-year period ended December 31, 2013 have been audited by Rothstein Kass, independent registered public accounting firm, and are incorporated herein in reliance upon such report given upon the authority of said firm as experts in accounting and auditing.

#### INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

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, as amended, for the fiscal year ended December 31, 2013;

·our Quarterly Report on Form 10-Q for the quarter ended March 31, 2014;

·our Current Reports on Form 8-K filed with the SEC on January 2, March 5, March 26, March 27, April 11, May 9, May 28, and May 30, 2014 (not including any information furnished under Items 2.02 or 7.01, including the related exhibits, which information is not incorporated by reference herein); and

all of the filings pursuant to the Exchange Act, after the date of the filing of the original registration statement and prior to the effectiveness of the registration statement.

37

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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.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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.

You should rely only on information contained in, or incorporated by reference into, this prospectus and the accompanying prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus or the accompanying prospectus, or incorporated by reference in this prospectus or the accompanying prospectus.

#### WHERE YOU CAN FIND MORE INFORMATION

This prospectus 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, 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 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 Commission'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](http://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.

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

## TABLE OF CONTENTS

Prospectus Summary	3
Risk Factors	10
Use of Proceeds	24
Dilution	25
Market for Our Common Equity	26
The Asset Contribution Agreement	27
Description of Securities	31
Plan of Distribution	36
Legal Matters	37
Experts	37
Incorporation of Certain Information by Reference	37
Where You Can Find More Information	38

BIOTIME, INC.

8,902,077 Common Shares

8,000,000 Common Share Purchase Warrants

8,000,000 Common Shares Issuable Upon the Exercise of Warrants

PROSPECTUS

June 11, 2014

39

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