

BIOTIME INC
Form 424B5
October 12, 2017

The information in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are part of an effective registration statement filed with the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell, nor do they seek an offer to buy, these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated October 12, 2017

Filed Pursuant to Rule 424(b)(5)

Registration No. 333-217182

PRELIMINARY PROSPECTUS SUPPLEMENT

(To Prospectus dated May 5, 2017)

Shares of Common Stock

We are offering _____ shares of our common stock, no par value. Our common stock is listed on the NYSE American and on the Tel Aviv Stock Exchange under the symbol "BTX." On October 11, 2017, the last reported sale price for our common stock on the NYSE American was \$2.77 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-8 of this prospectus supplement.

| | Per Share | Total |
|---|--------------|-------|
| Public offering price | \$ | \$ |
| Underwriting discounts and commissions ⁽¹⁾ | \$ | \$ |

Proceeds to us, before expenses \$ \$

(1) We have also agreed to reimburse the underwriters for certain of their expenses. See “Underwriting” beginning on page S-26 of this prospectus supplement for more information about these arrangements.

We have granted the underwriters the right to purchase up to an aggregate of additional shares of our common stock. The underwriters may exercise this right at any time, in whole or in part, within 30 days following the date of this prospectus supplement to cover over allotments, if any. If the underwriters exercise the option in full, the total underwriting discount payable by us will be \$, and the total proceeds to us, before expenses, will be \$..

Certain of our existing significant shareholders, Broadwood Partners, L.P. and Broadwood Capital, Inc., both of which are affiliated with Neal Bradsher, a member of our Board of Directors, have submitted indications of interest to purchase shares of our common stock in this offering at the public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer or no shares in this offering to these shareholders, and the shareholders may determine to purchase more, fewer or no shares in this offering.

We anticipate that delivery of the common stock against payment will be made on or about October , 2017.

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 supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Sole Book-Running Manager

RAYMOND JAMES

The date of this prospectus supplement is October , 2017

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Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who come into possession of this prospectus and any free writing prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any free writing prospectus applicable to that jurisdiction.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering of the securities offered hereby and also adds to and updates the information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to this offering and some of which may have been supplemented or superseded by information in this prospectus supplement or documents incorporated or deemed to be incorporated by reference into this prospectus supplement that we filed with the SEC subsequent to the date of the prospectus. To the extent that there is any conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference herein or therein, on the other hand, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus or incorporated herein or therein by reference and in any free writing prospectus that we have authorized for use in connection with this offering. We have not, and the underwriters have not, authorized anyone to provide you with information that is different. We and the underwriters are offering to sell, and seeking offers to buy, the securities offered hereby only in jurisdictions where offers and sales are permitted. The information contained, or incorporated by reference, in this prospectus supplement and contained, or incorporated by reference, in the accompanying prospectus is accurate only as of the respective dates thereof, regardless of the time of delivery of those respective documents, or of any sale of our shares of common stock. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents we have referred you to in the sections titled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” below.

We own or have rights to trademarks or trade names that we use in conjunction with the operation of our business. HyStem®, Hextend®, and Renevia® are registered trademarks of BioTime, Inc., and ReGlyde™ and Premvia™ are trademarks of BioTime, Inc. OpRegen® is a registered trademark of Cell Cure Neurosciences Ltd. DetermaVu™ is a registered trademark of OncoCyte Corporation. Each trademark, trade name or service mark of any other company appearing in this prospectus supplement or the accompanying prospectus belongs to its holder. Use or display by us of other parties’ trademarks, trade names or service marks is not intended to and does not imply a relationship with, or endorsement or sponsorship by us of, the trademark, trade name or service mark owner.

The industry and market data contained or incorporated by reference into this prospectus supplement are based on independent industry publications, reports by market research firms or other published independent sources. Although we believe these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy and completeness, as industry and market data are subject to change and cannot always be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data

gathering process and other limitations and uncertainties inherent in any statistical survey of market shares. Although we are not aware of any misstatements regarding the market and industry data presented or incorporated by reference into this prospectus supplement, these estimates involve risks and uncertainties and are subject to change based on various factors including those discussed in the section titled "Risk Factors." Accordingly, investors should not place undue reliance on this information.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our shares of common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the “Risk Factors” section contained in this prospectus supplement and in the accompanying prospectus. References to “we,” “us,” and “our” mean BioTime, Inc. and its consolidated 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 consolidated subsidiaries.

Business Overview

We are a late-stage, clinical biotechnology company focused on developing and commercializing products addressing degenerative diseases. Our current clinical programs are targeting three primary sectors: aesthetics, ophthalmology and cell/drug delivery. Our clinical programs are based on two platform technologies: pluripotent cells that are capable of becoming any of the cell types in the human body, and a proprietary three dimensional cell and drug delivery matrix technology. The foundation of our cell delivery platform is our HyStem® cell and drug delivery matrix technology. Renevia®, a cell delivery product, met its primary endpoint in a European Union pivotal clinical trial for the treatment of facial lipoatrophy in HIV patients earlier this year. Submission for approval of Renevia® is expected later this year, with an anticipated commercial launch in 2018. OpRegen®, a retinal pigment epithelium transplant therapy, is in a Phase I/IIa multicenter clinical trial for the treatment of dry age-related macular degeneration. Age-related macular degeneration, or AMD, is the leading cause of blindness in people over the age of 60, and dry-AMD accounts for approximately 90% of all AMD.

We also have significant equity holdings in two publicly traded companies, Asterias Biotherapeutics, Inc., or Asterias, and OncoCyte Corporation, or OncoCyte, which we founded and which, until recently, were our majority-owned consolidated subsidiaries. Asterias (NYSE American: AST) is presently focused on advancing three clinical-stage programs that have the potential to address areas of very high unmet medical need in the fields of neurology (spinal cord injury) and oncology (Acute Myeloid Leukemia and lung cancer). OncoCyte (NYSE American: OCX) is developing confirmatory diagnostic tests for lung cancer, breast cancer, and bladder cancer utilizing novel liquid biopsy technology. As of October 6, 2017, we owned 14,674,244 shares of OncoCyte common stock with a value of approximately \$87.3 million and 21,747,569 shares of Asterias common stock with a value of approximately \$72.9 million.

We also seek to leverage our substantial intellectual property portfolio by advancing early-stage programs. In January 2017 we formed AgeX Therapeutics, Inc., or AgeX, to continue development of early-stage programs. In August 2017 AgeX completed an asset acquisition and stock sale pursuant to which it received certain assets from us for use in its research and development programs and raised \$10 million in cash to finance its operations. AgeX will focus on the development of regenerative medicine technologies targeting the diseases of aging and metabolic disorders. Its initial programs are focusing on utilizing brown adipose tissue (“brown fat”) targeting diabetes and obesity, regenerative vascular progenitors for cardiovascular repair and our PureStem® technology with new discoveries in telomerase manipulation to create induced tissue regeneration (iTR). We now own approximately 85% of the issued and outstanding shares of AgeX common stock.

Facial Aesthetics

Renevia® consists of our cell-transplantation delivery matrix (HyStem®) combined with the patient’s own adipose progenitor cells. As our lead facial aesthetics product, Renevia® is a potential treatment for HIV-associated facial lipoatrophy, a syndrome that occurs in HIV-infected patients who are being treated with antiretroviral medications. “Lipoatrophy” is another word for “fat loss” or “deficiency.” Approximately 350,000 people in Europe have HIV-related lipoatrophy or facial wasting.

Renevia® met the primary endpoint in a pivotal clinical trial in Europe to assess its safety and efficacy in restoring normal skin contours in patients whose subcutaneous fat, or adipose tissue, has been lost due to the use of certain drugs often used to treat patients with HIV. In this pivotal clinical trial, we studied patients with HIV-associated lipoatrophy. All Renevia® transplants were well tolerated and there were no device-related serious adverse events noted in this pivotal clinical trial. The most common adverse events were gastrointestinal disorders, infections and infestations and general disorders and administration site conditions. The primary endpoint was the change in hemifacial volume at six months in the treated patients compared to patients in the delayed treatment arm as measured by 3-D photographic volumetric assessment. The 3-D volumetric endpoint directly measures retained volume over time.

We now have the remaining required data, secondary endpoints and safety report to complete the clinical data package necessary to file for a CE mark in Europe. The secondary endpoints, such as qualitative improvements, trended positive and support the statistically significant primary endpoint. Secondary data points were not powered for statistical significance, but positive trends were seen in both the Mid-Face Volume Deficit Scale and Body Image Quality of Life Inventory. We remain on track for filing the CE mark application by the end of this year with possible approval and launch next year.

We also see this trial as supportive of U.S. development of Renevia® for providing additional forms of facial volume restorations, whether from drugs, trauma or aging, which would be a much larger market opportunity. Developed as an alternative for traditional fat transfer procedures, Renevia® is designed to mimic the naturally-occurring extracellular matrix and provide a 3-D scaffold that enables effective cell transplant, engraftment and proliferation. Renevia® may address an immediate need in cosmetic and reconstructive surgeries and other procedures by improving the process of transplanting adipose fat derived cells or other cells. Cell types such as adipose stem cells obtained from a patient through liposuction can be transplanted back into the same patient at another location in the body, without the risk of rejection associated with the transplant of donor tissues.

Renevia® is also being developed with the goal of providing a natural, long-lasting improvement to the patient's skin contouring. It is estimated that the global facial aesthetics market was valued at \$2.5 billion in 2013 and is expected to reach \$5.4 billion by 2020. We believe there are approximately 460,000 procedures per year in which Renevia® could possibly be utilized apart from the current developed use as a potential treatment for HIV related facial lipoatrophy. In addition, in 2014 there were approximately one million augmentation or reconstruction surgical procedures performed in the United States. Such procedures include approximately 70,000 reimbursed facial fat transfer procedures and an estimated 500,000 cash pay facial fat transfer procedures, approximately 220,000 liposuction procedures, approximately 125,000 rhytidectomy procedures, and approximately 125,000 abdominoplasty procedures. In addition, we believe Renevia® may be able to serve as a premium alternative to dermal fillers, of which approximately 2.3 million procedures are performed in the United States per year. We believe Renevia® has the potential for better, long-lasting and more natural outcome than fillers by enabling the growth of new facial tissue. We recently announced that an investigator-led clinical trial has successfully treated its first patient in a study of Premvia™ as a carrier for stromal vascular fraction, or SVF, cells for the treatment of age-related volume loss in the face. This is the first clinical trial to study Premvia™ in a purely cosmetic application. The objective of this investigator-led clinical trial is to evaluate the safety and performance of Premvia™ as a carrier for autologous SVF in non-HIV patients. Premvia™ has 510(k) clearance in the U.S. for wound management, and, known as Renevia® in Europe, was the subject of the European pivotal clinical trial.

Ophthalmology

OpRegen® is our lead product candidate for ophthalmological disorders. It is a suspension of retinal pigment epithelial, or RPE, cells that are derived from pluripotent cells. RPE cells form the back lining of the retina, and

support the function of photoreceptors (rods and cones). RPE cells can be damaged and lost in various forms of retinal degeneration. The OpRegen® therapeutic approach is designed to replace damaged or lost RPE cells and possibly slow disease progression and/or preserve or restore visual function. It is currently in a Phase I/IIa clinical trial for the treatment of the dry form of age-related macular degeneration. AMD affects more than 30 million people worldwide and approximately 1.6 million people are newly diagnosed annually in the U.S. AMD is the leading cause of blindness in people over the age of 60. Approximately 90 percent of AMD patients suffer from the dry form, for which the U.S. Food and Drug Administration, or FDA, has not approved any therapies. Two approved therapies in Wet-AMD, Lucentis and Eylea, account for approximately \$6.0 billion in worldwide sales in 2016.

The Data Safety Monitoring Board, or DSMB, has authorized us to move forward with enrollment for cohort 3. The DSMB is an independent group of medical experts closely monitoring the Phase I/IIa OpRegen® clinical trial. In cohort 3 we plan to treat patients at our current sites in Israel and at two U.S. sites. The administration of the implant in cohort 3 is being optimized for cell concentration and volume prior to cohort 4. In cohort 4, we plan to treat patients in earlier stages of the disease that are likely to be the target patient population for the therapy.

We presented data from the Phase I/IIa clinical trial of OpRegen® at the Association for Research in Vision and Ophthalmology, or ARVO, annual meeting in May. The presentation reported clinical trial data from patients in the first two cohorts. Imaging analysis suggests the transplanted OpRegen cells remained in place (engrafted) even at the one year follow up and particularly uniquely in an area of the scar that was completely depleted of retinal pigment epithelium (RPE) because of the advanced stages of the disease. There was also possible evidence of a biological response with some areas appearing to show structural improvement (a thickening of the area of the neural retina above the scar) without any signs of retinal edema, a fluid build-up that can further compromise vision.

In February 2017, we expanded our ophthalmology portfolio through the acquisition of exclusive global rights to technology from the University of Pittsburgh through the execution of an exclusive license agreement. This technology allows the generation of three-dimensional laminated human retinal tissue derived from human pluripotent cells. This tissue contains all the cell types and layers of the human retina and has shown evidence of functional integration in proof of concept animal models for advanced retinal degeneration. The technology is being developed for implantation in patients to potentially treat or prevent a variety of retinal degenerative diseases.

Cell and Drug Delivery

In addition to Renevia®, we have two additional primary programs utilizing our proprietary HyStem® technology. HyStem®-BDNF is a preclinical development program for the delivery of recombinant human brain-derived neurotrophic factor, or BDNF, directly into the stroke cavity of patients with the goal of aiding in tissue repair and functional recovery. ReGlyde™ is in preclinical development as a device for viscosupplementation and a combination product for drug delivery in osteoarthritis, or OA. The viscosupplementation device program aims to administer ReGlyde™ directly into affected OA joints to provide joint lubrication to reduce pain and improve quality of life. The drug delivery programs seek to enable the sustained release of therapeutics in affected OA joints to slow or reverse disease progression, in addition to improving pain and joint function. Also included in our delivery platform is Premvia™, which is a HyStem® hydrogel formulation for the management of wounds including partial and full-thickness wounds, ulcers, tunneled/undermined wounds, surgical wounds, and burns. Premvia™ was cleared by the FDA via the 510(k) device pathway.

In addition to these programs, we are developing HyStem® product enhancements. Current efforts are focused on the development of a frozen liquid product format, which, if successful, will make significant improvements in end-user convenience.

Our Subsidiaries and Our Affiliates

In order to efficiently advance product candidates through the clinical trial process, we have historically created operating subsidiaries for each program and product line. Our management believes this approach has fostered an efficient use of resources and reduced shareholder dilution, especially during the early stages of development for therapeutic and non-therapeutic product lines, as compared to strategies commonly deployed by other companies in the biotechnology industry. As a result, we, with our subsidiaries and affiliates, have been able to develop multiple clinical-stage products rather than being dependent on a single product program. We and some of our subsidiaries and affiliates have also received substantial amounts of non-dilutive financial support from government and nonprofit organizations that are seeking, based on rigorous scientific review processes, to identify and accelerate the development of potential breakthroughs in the treatment of various major diseases.

More recently, as many of our programs are maturing, we have focused on simplifying our business, focusing on therapeutic development programs and increasing transparency. Simplification of our corporate structure and operations is important as it helps us focus on our high-priority activities, especially candidates in human clinical development. Simplification also helps us communicate more effectively to prospective investors, analysts and partners. Asterias and OncoCyte, our affiliates, have evolved into publicly traded companies with shares traded on the NYSE American.

In July 2017, we purchased all of the outstanding convertible notes and ordinary shares of Cell Cure Neurosciences Ltd., or Cell Cure, held by Hadasit Bio-Holdings Ltd., or HBL, a shareholder of Cell Cure that owned 21.2% of Cell Cure's issued and outstanding ordinary shares and substantially all of its outstanding convertible notes other than those held by us. On the same date, we also purchased all of the Cell Cure ordinary shares owned by Teva Pharmaceutical Industries Ltd., or Teva. Following the consummation of the transactions with HBL and Teva, we hold 99.8% of the issued and outstanding ordinary shares of Cell Cure.

In August 2017 AgeX completed an asset acquisition and stock sale pursuant to which it received certain assets from us for use in its research and development programs and raised \$10 million in cash to finance its operations. We own approximately 85% of the issued and outstanding shares of AgeX common stock.

The following table summarizes our subsidiaries and affiliates, their respective principal fields of business, our approximate percentage ownership, directly and through subsidiaries, as of October 6, 2017, and the country where their principal business is located:

| Subsidiaries and Affiliates | Field of Business | BioTime Ownership | Country |
|------------------------------------|---|--------------------------|----------------|
| Cell Cure Neurosciences Ltd. | Products to treat age-related macular degeneration | 98.8 | %(1) Israel |
| ES Cell International Pte. Ltd. | Stem cell products for research, including clinical grade cell lines produced under cGMP | 100 | % Singapore |
| LifeMap Sciences, Inc. | Biomedical, gene, disease, and stem cell databases and tools | 82 | %(2) USA |
| OncoCyte Corporation(3) | Cancer diagnostics | 47 | % USA |
| OrthoCyte Corporation | Developing bone grafting products for orthopedic diseases and injuries | 99.8 | % USA |
| ReCyte Therapeutics, Inc.(2) | Research and development involved in stem cell-derived endothelial and cardiovascular related progenitor cells for the treatment of vascular disorders, ischemic conditions and brown adipocytes for type-2 diabetes and obesity | 94.8 | % USA |
| Asterias Biotherapeutics, Inc.(4) | Therapeutic products derived from pluripotent cells, and immunotherapy products. Clinical programs include: AST-OPC1 for spinal cord injury, AST-VAC1 for acute myelogenous leukemia, and AST-VAC2 for non-small cell lung cancer | 43 | % USA |
| AgeX Therapeutics, Inc. | Research and development relating to cell immortality and regenerative biology by developing products for the treatment of aging and age-related diseases | 85 | % USA |

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- (1) Includes shares owned by us and ES Cell International Pte. Ltd. but does not include shares that would be owned by us, if we were to convert certain convertible debt into Cell Cure ordinary shares.
- (2) Percentage directly owned by AgeX.
- (3) As of February 17, 2017, we deconsolidated OncoCyte, and OncoCyte is no longer a subsidiary of ours as of that date, but remains an affiliate.
- (4) Since the deconsolidation of Asterias in May 2016, Asterias is an affiliate.

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We intend to continue to work on simplifying our corporate, financial and organizational structure to allow us to execute our objectives more efficiently, while also making it much easier for investors, and other external stakeholders, to better understand our company. Our purpose is to deliver therapies for significant unmet, or under-met, needs to patients, while creating value for our investors. We believe that we have several valuable assets within our company, our subsidiaries and our affiliates.

Product Candidates of our Publicly-Traded Affiliates

Asterias - Therapeutic Products in Neurology and Oncology

Asterias is presently focused on advancing three clinical-stage programs, which have the potential to address areas unmet medical need in the fields of neurology and oncology. Asterias' lead products are:

AST-OPC1, a therapy derived from pluripotent cells that is currently in a Phase I/IIa clinical trial for spinal cord injuries. The 12-month data showed 67% (4/6) of cohort 2 (AIS-A injuries administered 10 million AST-OPC1 cells) subjects have recovered 2 or more motor levels on at least one side through 12 months, which is more than double the rates of recovery seen in both matched historical controls and published data in a similar population. Also, the FDA granted Asterias' request for AST-OPC1 to be designated a Regenerative Medicine Advanced Therapy under the 21st Century Cures Act;

AST-VAC1, a patient-specific cancer immunotherapy with promising Phase II clinical trial data in acute myeloid leukemia, or AML, indicating that AST-VAC1 was well-tolerated over multiple vaccinations; and

AST-VAC2, a non-patient specific cancer immunotherapy for which the initiation of a Phase I/IIa clinical trial in non-small cell lung cancer is planned for October 2017. In September 2017, the Medicines and Healthcare Products Regulatory Agency and the NHS Research Ethics Committee have provided the necessary approvals to initiate the first-in-human clinical trial of AST-VAC2 in the United Kingdom. The trial, which is being sponsored and managed by Cancer Research UK, will examine the safety, tolerability, immunogenicity and activity of AST-VAC2 in non-small cell lung cancer patients and is expected to be initiated later this year.

OncoCyte - Liquid Biopsies for Diagnosis of Cancer

OncoCyte is developing confirmatory diagnostic tests for lung cancer, breast cancer, and bladder cancer utilizing novel liquid biopsy technology. While current biopsy tests use invasive surgical procedures to provide tissue samples to determine if a tumor is benign or malignant, OncoCyte is developing a next generation of diagnostic tests that will

be based on liquid biopsies using blood or urine samples. OncoCyte recently conducted a 300-patient study of its lung cancer test. In March 2017, OncoCyte announced the successful completion of the study. In September 2017, OncoCyte announced that its CLIA laboratory has successfully completed a rigorous validation study of DetermaVu™, OncoCyte's diagnostic test for lung cancer. The CLIA lab validation study included specific protocols to confirm the accuracy, reproducibility, and precision/repeatability of DetermaVu™.

The Clinical Validation Study is underway and is expected to be completed in the fourth quarter of 2017. In this study, approximately 300 new blinded blood samples, which have been prospectively collected will be assayed in the CLIA lab using DetermaVu™. The performance of the test will be assessed against the clinical diagnosis of the patients from whom the samples were collected. If the Clinical Validation Study is successful and the results meet commercial requirements, OncoCyte expects to commence the commercial launch of DetermaVu™.

Product and Product Candidate Pipeline

In addition to the product candidates described above, together with our subsidiaries and affiliates, we are advancing a robust pipeline which includes the following additional programs:

We have a regenerative medicine orthopedic program that is a collaboration between our subsidiary OrthoCyte Corporation and Heraeus Medical GmbH. The companies are developing innovative bone grafting therapies to address difficult to heal and/or compromised bone fractures based on the use of our proprietary PureStem[®] human embryonic progenitor cell technology.

Our subsidiary LifeMap Sciences, Inc., or LifeMap, is currently developing and marketing technology healthcare solutions, such as an integrated online database and other software research tools for biomedical and stem cell research.

cGMP-compliant human embryonic stem cell lines are available for research and clinical studies through our subsidiary ES Cell.

Hextend[®], our FDA-approved blood plasma expander, is marketed in collaboration with Hospira, Inc. in the United States and under an agreement with CJ Corporation in South Korea.

Recent Developments

Preliminary Unaudited Third Quarter 2017 Financial Expectations

On a preliminary unaudited basis, we expect our cash and cash equivalents as of September 30, 2017 to be approximately \$16.7 million. This estimate of cash and cash equivalents is our preliminary estimate based on currently available information. It does not present all necessary information for an understanding of our financial condition as of September 30, 2017 or our results of operations for the three months ended September 30, 2017. As we complete our quarter-end financial close process and finalize our third quarter 2017 unaudited financial statements, we will be required to make significant judgments in a number of areas that may result in the estimate provided herein being different than the final audited financial information. This preliminary estimate has been prepared by and is the responsibility of our management. Our independent registered public accounting firm has not audited, reviewed or performed any procedures with respect to this preliminary estimate or the accounting treatment thereof and does not express an opinion or any other form of assurance with respect thereto. We expect to complete our unaudited financial statements for the quarter ended September 30, 2017 subsequent to the completion of this offering. It is possible that we or our independent registered public accounting firm may identify items that require us to make adjustments to the preliminary estimated cash balance set forth above and those changes could be material. Accordingly, undue reliance

should not be placed on this preliminary estimate. The preliminary estimate is not necessarily indicative of any future period and should be read together with the sections titled “Risk Factors,” “Disclosure Regarding Forward-Looking Statements,” and our financial statements, related notes and other financial information incorporated by reference in this prospectus supplement.

Company Information

We were incorporated in the State of California on November 30, 1990. Our common stock is listed on the NYSE American and the Tel Aviv Stock Exchange under the symbol “BTX.” The address of our principal executive office is 1010 Atlantic Avenue, Suite 102, Alameda, California 94501, and our phone number at that address is 510-521-3390. Our corporate website address is www.biotimeinc.com. The information contained on our website is not a part of, and should not be construed as being incorporated by reference into, this prospectus supplement.

THE OFFERING

Common stock offered shares

**Underwriters' over
allotment option** shares

Offering Price \$

**Common stock to be
outstanding after this
offering** shares (or shares if the underwriters exercise their option to purchase
additional shares in full)

Use of proceeds We intend to use the net proceeds from this offering for general corporate purposes,
including, without limitation, to fund clinical trials, research and development activities
and for general working capital. See "Use of Proceeds" on page S-22.

Risk factors See "Risk Factors" beginning on S-8 of this prospectus supplement and on page 5 of the
accompanying prospectus for a discussion of factors you should consider carefully
before investing in our common stock.

NYSE American Symbol "BTX"

Certain of our existing significant shareholders, Broadwood Partners, L.P. and Broadwood Capital, Inc., both of which are affiliated with Neal Bradsher, a member of our Board of Directors, have submitted indications of interest to purchase shares of our common stock in this offering at the public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer or no shares in this offering to these shareholders, and the shareholders may determine to purchase more, fewer or no shares in this offering.

Unless we indicate otherwise, all information in this prospectus supplement is based on 110,875,610 shares of common stock outstanding as of June 30, 2017, and excludes:

9,394,862 shares of common stock that may be issued upon exercise of warrants, at a weighted average exercise price of \$4.55 per share;

7,868,187 shares of common stock that may be issued upon exercise of options under our 2002 Stock Option Plan and our 2012 Equity Incentive Plan, with a weighted average exercise price of \$3.49 per share;

75,000 restricted stock units issued to our executive officers under our 2012 Equity Incentive Plan; and

7,795,006 shares of common stock available for future issuance under our 2002 Stock Option Plan and our 2012 Equity Incentive Plan.

In addition, as of June 30, 2017, up to \$25.0 million of common stock may be issued pursuant to our Controlled Equity OfferingSM Sales Agreement with Cantor Fitzgerald & Co., provided that no common stock may be issued prior to the expiration of the 90-day lock-up period following this offering.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise by the underwriters of their option to purchase additional shares of our common stock and no exercise of outstanding stock options or warrants.

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RISK FACTORS

Investing in our common stock involves risk. Before deciding whether to invest in our shares of common stock, you should consider carefully the risks and uncertainties described below and discussed under the section titled “Risk Factors” on page 5 of the accompanying prospectus. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our shares of common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below titled “Disclosure Regarding Forward-Looking Statements.”

Risks Related to This Offering

Investors in our common shares will experience immediate and substantial dilution in the book value per share of the shares of common stock purchased in this offering and may experience further dilution in the future.

The public offering price of the common stock offered pursuant to this prospectus supplement is substantially higher than the net tangible book value per share of our common stock. Therefore, purchasers of shares of common stock in this offering will incur immediate and substantial dilution in the pro forma net tangible book value per share of common stock from the public offering price per share of \$. See the section titled “Dilution” below for a more detailed discussion of the dilution investors in this offering will incur if they purchase shares in this offering.

The exercise of outstanding stock options would cause additional dilution, which could cause the price of our common stock to decline.

We also expect to continue to utilize equity-based compensation including warrants and options to acquire shares of our common stock. As of June 30, 2017, there were 9,394,862 shares of common stock issuable upon exercise of warrants at a weighted average exercise price of \$4.55 per share, 7,868,187 shares of common stock issuable upon exercise of options under our 2002 Stock Option Plan and our 2012 Equity Incentive Plan with a weighted average exercise price of \$3.49 per share and 7,795,006 shares of common stock available for future issuance under our 2002 Stock Option Plan and our 2012 Equity Incentive Plan. To the extent any warrants or options are exercised or if we issue additional stock options, warrants and other types of equity in the future as part of stock-based compensation, capital raising transactions, financings or other strategic transactions in the future, investors may experience further dilution.

Investors in our common shares may experience dilution of their ownership interests as a result of potential future issuances of additional common shares and preferred shares by us and our subsidiaries.

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 expect that we will seek to raise additional capital from time to time in the future, including pursuant to our Controlled Equity OfferingSM Sales Agreement with Cantor Fitzgerald & Co., provided that no common stock may be issued prior to the expiration of the 90-day lock-up period following this offering. We and our subsidiaries may issue additional common shares or other securities that are convertible into or exercisable for common shares in order to raise additional capital, or in connection with hiring or retaining employees or consultants, or in connection with future acquisitions of licenses to technology or rights to acquire products, or in connection with future business acquisitions, or for other business purposes. The future issuance of any such additional common shares or other securities may create downward pressure on the trading price of our common shares.

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

Future sales of substantial amounts of our common stock could adversely affect the market price of our common stock.

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. If additional capital is raised through the sale of equity or convertible debt securities, or perceptions that those sales could occur, the issuance of these securities could result in further dilution to investors purchasing our common stock in this offering or result in downward pressure on the price of our common stock, and our ability to raise capital in the future. Furthermore, certain of our existing shareholders, Broadwood Partners, L.P. and Broadwood Capital, Inc., both of which are affiliated with Neal Bradsher, a member of our Board of Directors, have submitted indications of interest to purchase shares of our common stock in this offering at the public offering price and on the same terms as the other investors in this offering.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of common stock and sellers remain willing to sell the shares. All of the securities issued in the offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act.

Management will have broad discretion as to the use of the proceeds from this offering, and may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds from this offering. Our management may, among other possible uses of proceeds, use proceeds to fund clinical trials of products we are developing, to finance our research and develop programs, to acquire one or more businesses or new business assets, and for general working capital, and we may invest proceeds in one or more of our existing subsidiaries or affiliates, or in any new subsidiaries that we may form, or new entities we may become affiliated with. We may use the proceeds for purposes that are not contemplated at the time of the offering. All of these potential uses of proceeds involve risks and may not improve the performance or prospects of our business or the business or prospects of our subsidiaries, and may not increase the market value of our shares of common stock.

Risks Related to Our Business Operations

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

Our operating losses for the six months ended June 30, 2017 and for the fiscal years ended December 31, 2016 and 2015, were \$21.6 million, \$59 million and \$65.8 million, respectively, and we had an accumulated deficit of \$159 million as of June 30, 2017. We primarily finance our operations through the sale of equity securities, research grants, licensing fees, royalties on product sales by our licensees, and subscription fees and advertising revenue from database products. Ultimately, our ability to generate sufficient operating revenue to earn a profit depends upon our success in developing and marketing or licensing our products, diagnostic tests, and technology. As a developer of therapeutic products derived from pluripotent cells, Asterias will face substantially the same kind of risks that affect our business, as well as the risks related to our industry generally.

We will spend a substantial amount of our capital on research and development and there is no assurance that we will succeed in developing products and technologies that are useful in medicine.

We are attempting to develop new medical products and technology. None of our experimental products and technologies has received regulatory approval for commercialization 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 are being developed. The experimentation we are doing is costly, time consuming, and uncertain as to its results. We incurred research and development expenses amounting to \$12.8 million during the six months ended June 30, 2017, and \$36.1 million and \$42.6 million during the fiscal years ended December 31, 2016 and 2015, respectively. If we are successful in developing a new technology or products, 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 devices, 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 other companies. Any such arrangements may be dilutive to our ownership or economic interest in the products we develop, and we might have to accept royalty payments on the sale of products rather than receiving the gross revenues from product sales. In addition, we may discontinue one or more of the research or product development programs. Other programs slated for development including those we consolidate in a new subsidiary, AgeX Therapeutics, Inc., may be delayed or discontinued should adequate funding on acceptable terms not be available.

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 available.

On a preliminary unaudited basis, our expected cash and cash equivalents as of September 30, 2017 is estimated to be \$16.7 million. During the first quarter of 2017, we raised approximately \$18.5 million after underwriting discounts and other expenses through the sale of our common shares, but there can be no assurance that we or our subsidiaries will be able to raise additional funds on favorable terms or at all, or that any funds raised will be sufficient to permit us or our subsidiaries to develop and market our products and technology. Unless we and our subsidiaries are able to generate sufficient revenue or raise additional funds when needed, it is likely that we will be unable to continue our planned activities or achieve profitability, 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 access to capital increases through growth in revenues, additional equity investments or borrowings.

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

Sales of Hextend[®] have already been adversely impacted by the availability of other products that are commonly used in surgery and trauma care and sell at low prices. Ocata, which was recently acquired by a subsidiary of Astellas Pharma, Inc. for \$379 million, is conducting clinical trials of a pluripotent stem cell product designed to treat AMD. If the Ocata product is proven to be safe and effective, it may reach the market ahead of OpRegen[®]. Moreover, Ocata was recently issued a patent pertaining to the manufacture of RPE products that could adversely impact the rights of Cell Cure to manufacture OpRegen[®]. 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. There also is a risk that our competitors may succeed at developing safer or more effective products that could render our products and technologies obsolete or noncompetitive.

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

We and our subsidiaries and affiliates, including Asterias and OncoCyte, expect to continue to incur substantial research and product development expenses, and 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. Our ability, and the ability of Asterias and OncoCyte, to raise additional equity or debt capital will depend, not only on progress made in developing new products and technologies, but also on access to capital and conditions in the capital markets. There is no assurance that we, Asterias and OncoCyte will be able to raise capital at times and in amounts needed to finance product development, clinical trials, and general operations. Even if capital is available, it may not be available on terms that we or our shareholders would consider favorable. Sales of additional equity securities by us or our

subsidiaries could result in the dilution of the interests of present shareholders.

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

Pluripotent stem 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 pluripotent cells or other cells or products derived from pluripotent stem or other cells, we will need to develop processes and technology for the commercial production of those products. Pluripotent stem 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. We may not be able to sell our products in sufficient volumes to recover our costs or to earn a profit.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and health information privacy and security laws. If we are unable to comply, or has not fully complied, with such laws, it could face substantial penalties.

If we obtain FDA approval for any of our product candidates or technologies and begin commercializing those products or technologies in the United States, our operations may be subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, our proposed sales, marketing, and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;

federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;

the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;

HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and our implementing regulations, which imposes certain requirements relating to the privacy, security, and transmission of individually identifiable health information;

The Physician Payments Sunshine Act requires manufacturers of drugs, devices, biologics, and medical supplies to report annually to the U.S. Department of Health and Human Services information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations; and

state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payors, including commercial insurers, state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in government health care programs, such as Medicare and Medicaid, imprisonment, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Failure in our information technology and storage systems could significantly disrupt the operation of our business.

Our ability to execute our business plan and maintain operations depends on the continued and uninterrupted performance of our information technology, or IT, systems. IT systems are vulnerable to risks and damages from a variety of sources, including telecommunications or network failures, malicious human acts and natural disasters. Moreover, despite network security and back-up measures, some of our and our vendors' servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Despite

precautionary measures to prevent unanticipated problems that could affect our IT systems, sustained or repeated system failures that interrupt our ability to generate and maintain data could adversely affect our ability to operate our business.

The commercial success of any of our current or future product candidates will depend upon the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community.

Even with the approvals from the FDA and comparable foreign regulatory authorities, the commercial success of our products will depend in part on the health care providers, patients, and third-party payors accepting our product candidates as medically useful, cost-effective, and safe. Any product that we bring to the market may not gain market acceptance by physicians, patients, third-party payors and other health care providers. The degree of market acceptance of any of our products will depend on a number of factors, including without limitation:

the efficacy of the product as demonstrated in clinical studies and potential advantages over competing treatments;

the prevalence and severity of the disease and any side effects;

the clinical indications for which approval is granted, including any limitations or warnings contained in a product's approved labeling;

the convenience and ease of administration;

the cost of treatment, particular as additive to existing treatments;

the willingness of the patients and physicians to accept and use these therapies;

the marketing, sales and distribution support for the products;

the publicity concerning our products or competing products and treatments; and

the pricing and availability of third-party insurance coverage and reimbursement.

Even if a product displays a favorable efficacy and safety profile upon approval, market acceptance of the product remains uncertain. Efforts to educate the medical community and third-party payors on the benefits of the products may require significant investment and resources and may never be successful. If our products fail to achieve an adequate level of acceptance by physicians, patients, third-party payors, and other health care providers, we will not be able to generate sufficient revenue to become or remain profitable.

If the market opportunities for our product candidates are smaller than we believe they are, we may not meet our revenue expectations and, even assuming approval of a product candidate, our business may suffer.

Our projections of both the number of potential users in the markets we are attempting to address are based on our beliefs and estimates. You should bear in mind the following:

Our estimates have been derived from a variety of sources, including publications and scientific literature estimating the total number of patients, currently approved or used therapies, or market research as well as certain assumptions regarding the potential size of the market assuming broad regulatory approval or potential usage by physicians beyond the approved label, any of which may prove to be incorrect.

The scope of approval and potential use may be significantly narrower and the number of patients may turn out to be lower than expected.

Competitive agents or approaches may be approved or come into use by the relevant medical provider and the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, any which could adversely affect our results of operations and our business.

We rely and expect to continue to rely on third parties to manufacture our clinical product supplies, and if those third parties fail to obtain approval of government regulators, fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices our product candidates could be stopped, delayed, or made less profitable.

We do not currently have nor do we plan to acquire the infrastructure or capability internally to manufacture our clinical supplies and our technology platform, and we lack the resources and the capability to manufacture, whether on a clinical or commercial scale. With respect to our reliance on outside vendors:

These vendors also source raw materials in order to implement our technology solutions and manufacture our clinical supplies of our product candidates and we plan to continue relying on third parties to manufacture our product candidates on a commercial scale, if approved.

Facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted after we submit our marketing applications to the FDA.

We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs, for manufacture of our product candidates.

If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities.

We have limited or no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain or maintain regulatory approval for or market our product candidates, if approved.

We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of our product candidates, and the actual cost to manufacture our product candidates could materially and adversely affect the commercial viability of our product candidates. As a result, we may never be able to develop a commercially viable product.

In addition, our reliance on third-party manufacturers exposes us to the following additional risks:

We may be unable to identify manufacturers on acceptable terms or at all.

Our third-party manufacturers might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.

Contract manufacturers may not be able to execute our manufacturing procedures appropriately.

Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.

Manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.

We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our product candidates.

We may not be able to obtain enabling licenses of third-parties intellectual property rights.

Our third-party manufacturers could breach or terminate their agreement with us.

Each of these risks could delay our clinical trials, the approval, if any of our product candidates by the FDA or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue. In addition, we rely on third parties to perform release testing on our product candidates prior to delivery to patients. If these tests are not appropriately conducted and test data are not reliable, patients could be put at risk of serious harm and could result in product liability suits.

The manufacture of medical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide our product candidates to patients in clinical trials would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase

the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely.

Clinical studies are costly, time consuming and inherently risky, and we may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities.

Clinical development is expensive, time consuming and involves significant risk. We cannot guarantee that any clinical studies will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical studies can occur at any stage of development. Events that may prevent successful or timely completion of clinical development include but are not limited to:

inability to generate satisfactory preclinical, toxicology, or other in vivo or in vitro data or diagnostics to support the initiation or continuation of clinical studies necessary for product approval;

delays in reaching agreement on acceptable terms with CROs and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical study sites;

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delays in obtaining required Institutional Review Board, or IRB, approval at each clinical study site;

failure to permit the conduct of a study by regulatory authorities, after review of an investigational new drug, or IND, or equivalent foreign application or amendment;

delays in recruiting qualified patients in our clinical studies;

failure by clinical sites or our CROs or other third parties to adhere to clinical study requirements or report complete findings;

failure to perform the clinical studies in accordance with the FDA's good clinical practices requirements, or applicable foreign regulatory guidelines;

patients dropping out of our clinical studies;

occurrence of adverse events associated with our product candidates;

ability to use clinical trial results from foreign jurisdictions in support of U.S. regulatory approval;

changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;

the cost of clinical studies of our product candidates;

negative or inconclusive results from our clinical trials which may result in our deciding, or regulators requiring us, to conduct additional clinical studies or abandon development programs in other ongoing or planned indications for a product candidate; and

delays in reaching agreement on acceptable terms with third-party manufacturers and the time for manufacture of sufficient quantities of our product candidates for use in clinical studies.

Any inability to successfully complete clinical development and obtain regulatory approval could result in additional costs to us or impair our ability to generate revenue. Clinical study delays could also shorten any periods during which our products have patent protection and may allow competitors to develop and bring products to market before we do and may harm our business and results of operations.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability and costs. If the use or misuse of our product candidates harm patients, or is perceived to harm patients even when such harm is unrelated to our product candidates, our regulatory approvals could be revoked or otherwise negatively impacted and we could be subject to costly and damaging product liability claims.

The use or misuse of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact

with our products. There is a risk that our product candidates may induce adverse events. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

impairment of our business reputation;

initiation of investigations by regulators;

withdrawal of clinical trial participants;

costs due to related litigation;

distraction of management's attention from our primary business;

substantial monetary awards to patients or other claimants;

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the inability to commercialize our product candidates;

product recalls, withdrawals or labeling, marketing or promotional restrictions; and

decreased demand for our product candidates, if approved for commercial sale.

We believe our current product liability insurance coverage is appropriate in light of our clinical programs; however, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for product candidates, we intend to increase our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs or medical treatments that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Intellectual property we may develop using grants received from the federal government are subject to rights maintained by the government.

Research and development we perform that is funded by grants from the federal government, and any intellectual property that we create using those grants, is subject to the rights maintained by the federal government.

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

We face the risk of incurring liabilities to clinical trial patients if they incur any injuries as a result of their participation in the clinical trials. We will also be obligated to obtain information and prepare reports about the health of the clinical trial patients. We are not aware of any claims by patients alleging injuries suffered as a result of any of our clinical trials, but if any claims are made and if liability can be established, the amount of any liability that we or our subsidiaries may incur, could exceed any insurance coverage that we or our subsidiaries may obtain, and the amount of the liability could be material to our financial condition.

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

We believe that our continued success depends to a significant extent upon our efforts and ability to retain highly qualified personnel, including our Co-Chief Executive Officers, Dr. Michael West and Adi Mohanty. All of our officers and other employees are at-will employees, and therefore may terminate employment with us at any time with no advance notice. The loss of the services of Dr. West, Mr. Mohanty or other members of senior management of BioTime or of our subsidiaries could have a material adverse effect on us. Further, the replacement of any of such individuals likely would involve significant time and costs and may significantly delay or prevent the achievement of our business and clinical objectives and would harm our business.

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

If appropriate opportunities become available, we might attempt to acquire approved products, additional drug candidates, technologies, or businesses that we believe are a strategic fit with our business. If we pursue any transaction of that sort, the process of negotiating the acquisition and integrating an acquired product, drug candidate, technology, or business might result in operating difficulties and expenditures and might require significant management attention that would otherwise be available for ongoing development of our business, whether or not any such transaction is ever consummated. Moreover, we might never realize the anticipated benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities, or impairment expenses related to goodwill, and impairment or amortization expenses related to other intangible assets, which could harm our financial condition.

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. Our growth and entry into new products, technologies and markets will place significant additional pressure on our system of internal control over financial reporting. Any failure to maintain an effective system of internal control over financial reporting could limit our ability to report our financial results accurately and timely or to detect and prevent fraud. Operating our business through subsidiaries, some of which are located in foreign countries, also adds to the complexity of our internal control over financial reporting and adds to the risk of a system failure, an undetected improper use or expenditure of funds or other resources by a subsidiary, or a failure to properly report a transaction or financial results of a subsidiary. We allocate certain expenses among BioTime itself and one or more of our subsidiaries, which creates a risk that the allocations we make may not accurately reflect the benefit of an expenditure or use of financial or other resources by BioTime as the parent company and the subsidiaries among which the allocations are made. An inaccurate allocation may impact our consolidated financial results, particularly in the case of subsidiaries that we do not wholly own since our financial statements include adjustments to reflect the minority ownership interests in our subsidiaries held by others.

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

Government-imposed bans or restrictions on the use of embryos or hES cells in research and development in the United States and abroad could generally constrain stem cell research, thereby limiting the market and demand for our products. During March 2009, President Obama lifted certain restrictions on federal funding of research involving the use of hES cells, and in accordance with President Obama's Executive Order, the National Institutes of Health (NIH) has adopted new guidelines for determining the eligibility of hES cell lines for use in federally funded research. The central focus of the proposed guidelines is to assure that hES cells used in federally funded research were derived from human embryos that were created for reproductive purposes, were no longer needed for this purpose, and were voluntarily donated for research purposes with the informed written consent of the donors. The hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research. California law requires that stem cell research be conducted under the oversight of a stem cell review oversight committee (SCRO). Many kinds of stem cell research, including the derivation of new hES cell lines, may only be conducted in California with the prior written approval of the SCRO. A SCRO could prohibit or impose restrictions on the research that we plan to do. The use of hES cells may give rise to religious, moral, and ethical issues. 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 in all key markets. 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 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. Litigation, interferences, oppositions, inter partes reviews or other proceedings are, have been and may in the future be necessary in some instances to determine the validity and scope of certain of our proprietary rights, and in other instances to determine the validity, scope or non-infringement of certain patent rights claimed by third parties to be pertinent to the manufacture, use or sale of our products. This means that patents owned or licensed by us may be lost if the outcome of a proceeding is unfavorable to us.

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

Our success depends in part on our ability to obtain and defend patent and other intellectual property rights that are important to the commercialization of our products and product candidates. The degree of patent protection that will be afforded to our products and processes in the U.S. and in other important markets remains uncertain and is dependent upon the scope of protection decided upon by the patent offices, courts, administrative bodies and lawmakers in these countries. We can provide no assurance that we will successfully obtain or preserve patent protection for the technologies incorporated into our products and processes, or that the protection obtained will be of sufficient breadth and degree to protect our commercial interests in all countries where we conduct business. If we cannot prevent others from exploiting our inventions, we will not derive the benefit from them that we currently expect. Furthermore, we can provide no assurance that our products will not infringe patents or other intellectual property rights held by third parties.

In Europe, there is uncertainty about the eligibility of hES cell subject matter for patent protection. The European Patent Convention prohibits the granting of European patents for inventions that concern “uses of human embryos for industrial or commercial purposes.” A recent decision at the Court of Justice of the European Union interpreted parthenogenetically produced hES cells as patentable subject matter. Consequently, the European Patent Office now recognizes that human pluripotent cells (including human ES cells) can be created without a destructive use of human embryos as of June 5, 2003, and patent applications relating to hES cell subject matter with a filing and priority date after this date are no longer automatically excluded from patentability under Article 53 (a) EPC and Rule 28(c) EPC.

There is no certainty that we will be able to obtain licenses to intellectual property rights owned by third-parties.

There are no assurances that any of our intellectual property rights will guarantee protection or market exclusivity for our products and product candidates. In such cases, we may need to obtain enabling licenses from third parties to protect our products and product candidates, try to secure market exclusivity or avoid infringing on the intellectual property rights of third parties. If we are unable to fully protect our product candidates or achieve market exclusivity for our products and product candidates, our financial success will be dependent, in part, on our ability to protect and enforce our intellectual property rights, to operate without infringing upon the proprietary rights of others, or, when necessary, our ability to obtain enabling licenses.

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.

If we fail to comply with the extensive legal and regulatory requirements affecting the health care industry, we could face increased costs, penalties and a loss of business.

Our activities, and the activities of our subsidiaries, affiliates, collaborators, distributors and other third-party providers, are subject to extensive government regulation and oversight both in the U.S. and in foreign jurisdictions. The FDA and comparable agencies in other jurisdictions directly regulate many of our most critical business activities, including the conduct of preclinical and clinical studies, product manufacturing, advertising and promotion, product distribution, adverse event reporting and product risk management. Our interactions in the U.S. or abroad with physicians and other health care providers that prescribe or purchase our products are also subject to government regulation designed to prevent fraud and abuse in the sale and use of the products and place greater restrictions on the marketing practices of health care companies. Health care companies such as ours are facing heightened scrutiny of their relationships with health care providers from anti-corruption enforcement officials. In addition, health care companies such as ours have been the target of lawsuits and investigations alleging violations of government regulation, including claims asserting submission of incorrect pricing information, impermissible off-label promotion of pharmaceutical products, payments intended to influence the referral of health care business, submission of false

claims for government reimbursement, antitrust violations or violations related to environmental matters. Risks relating to compliance with laws and regulations may be heightened as we continue to operate globally.

Regulations governing the health care industry are subject to change, with possibly retroactive effect, including:

new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to health care availability, pricing or marketing practices, compliance with wage and hour laws and other employment practices, method of delivery, payment for health care products and services, compliance with health information and data privacy and security laws and regulations, tracking and reporting payments and other transfers of value made to physicians and teaching hospitals, extensive anti-bribery and anti-corruption prohibitions, product serialization and labeling requirements and used product take-back requirements;

changes in the FDA and foreign regulatory approval processes that may delay or prevent the approval of new products and result in lost market opportunity;

requirements that provide for increased transparency of clinical trial results and quality data, such as the EMA's clinical transparency policy, which could impact our ability to protect trade secrets and competitively-sensitive information contained in approval applications or could be misinterpreted leading to reputational damage, misperception or legal action which could harm our business; and

changes in FDA and foreign regulations that may require additional safety monitoring, labeling changes, restrictions on product distribution or use, or other measures after the introduction of our products to market, which could increase our costs of doing business, adversely affect the future permitted uses of approved products, or otherwise adversely affect the market for our products.

Violations of governmental regulation may be punishable by criminal and civil sanctions against us, including fines and civil monetary penalties and exclusion from participation in government programs, including Medicare and Medicaid, as well as against executives overseeing our business. In addition to penalties for violation of laws and regulations, we could be required to repay amounts we received from government payors, or pay additional rebates and interest if we are found to have miscalculated the pricing information we have submitted to the government. We cannot ensure that our compliance controls, policies and procedures will in every instance protect us from acts committed by our employees, collaborators, partners or third-party providers that would violate the laws or regulations of the jurisdictions in which we operate. Whether or not we have complied with the law, an investigation into alleged unlawful conduct could increase our expenses, damage our reputation, divert management time and attention and adversely affect our business.

Risks Related to our Dependence on Third Parties

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

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

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

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

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

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

We expect to rely on marketing partners or contract sales companies.

Even if we are able to develop our products and obtain necessary regulatory approvals, we may choose to partner on one or more products for marketing, selling or distributing our products. If we do not partner for commercial services, we and our subsidiaries will be dependent on our ability to build our own marketing and distribution capability for our new products, which would require the investment of significant financial and management resources, or we will need to find collaborative marketing partners or sales representatives, or wholesale distributors for the commercial sale of our products.

If we market products through arrangements with third parties, we may pay sales commissions to sales representatives or we may sell or consign products to distributors at wholesale prices. As a result, our gross profit from product sales may be lower than it would be if we were to sell our products directly to end users at retail prices through our own sales force. There can be no assurance we will 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.

Risks Pertaining to Our Common Shares

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

Our net income or loss will be impacted by changes in the market value of Asterias and OncoCyte common stock.

Because we use the equity method of accounting for the common stock of Asterias and OncoCyte that we hold at fair value, we will recognize gain or loss to the extent that the market value of Asterias and OncoCyte common stock changes from calendar quarter to calendar quarter, regardless of whether we sell any of those shares.

Because we are engaged in the development of pharmaceutical and stem cell therapy products and cancer diagnostic tests, the price of our common shares may rise and fall rapidly.

The market price of our common shares, like that of the shares of many biotechnology companies, has been highly volatile. The price of our common shares may rise rapidly in response to certain events, such as the commencement of clinical trials of an experimental new therapy or diagnostic test, even though the outcome of those trials and the likelihood of ultimate FDA approval of a therapeutic product remain uncertain. Similarly, prices of our common shares may fall rapidly in response to certain events such as unfavorable results of clinical trials or a delay or failure to obtain FDA approval. Additionally, the failure of our earnings to meet analysts' expectations could result in a significant rapid decline in the market price of our common shares. Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common shares.

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

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

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

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

Insiders continue to have substantial control over our company, which could limit your ability to influence the outcome of key transactions, including a change of control.

Our directors, executive officers and each of our shareholders who own greater than 5% of our outstanding common stock and their affiliates, in the aggregate, owned approximately 31% of the outstanding shares of our common stock as of September 30, 2017. Certain of our existing shareholders, Broadwood Partners, L.P. and Broadwood Capital, Inc., both of which are affiliated with Neal Bradsher, a member of our Board of Directors, have submitted indications of interest to purchase shares of our common stock in this offering at the public offering price. If such shareholders actually purchase shares of our common stock in the offering, immediately following this offering, the aggregate ownership of our directors, executive officers and each of our shareholders who own greater than 5% of our outstanding common stock and their affiliates will increase. As a result, these shareholders, if acting together, will be able to influence or control matters requiring approval by our shareholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control of our company, could deter certain public investors from purchasing our common stock and might ultimately affect the market price of our common stock.

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

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

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

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

The implementation of a new FASB accounting standard could increase the risk that our future consolidated financial statements could be qualified by going concern uncertainty.

FASB ASU No. 2014-15, "*Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*," which defines management's responsibility to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures, was effective for us for the year ended December 31, 2016, and all annual and interim periods thereafter. In connection with preparing consolidated financial statements for each annual and interim reporting period, ASU No. 2014-15 requires that an entity's management evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the consolidated financial statements are issued (or within one year after the date that the consolidated financial statements are available to be issued when applicable). As a result of the implementation of ASU No. 2014-15, we will be required to have more cash, cash equivalents, and liquid investments on hand on the date we issue or file our consolidated financial statements than had been the case during prior years in order to avoid a going concern qualification in our auditor's report and in the footnotes to our consolidated financial statements. If our consolidated financial statements were to become subject to a going concern qualification or uncertainty or if we are unable to alleviate substantial doubt as part of our going concern assessment, or both, the market price of our common stock could decline.

Asterias and OncoCyte will also be impacted by ASU No. 2014-15 in much the same manner as us. If the financial statements of Asterias, or OncoCyte, or both, were to become subject to a going concern qualification or uncertainty, the market price of their common stock could decline, resulting in a loss or decline in value of the Asterias shares we own, the OncoCyte shares we own, or both, as equity method investments at fair value.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus supplement, the accompanying prospectus and in the documents incorporated herein by reference 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, or 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, including, without limitation:

Our success in developing new cell products and technologies and identifying new product candidates;

Our ability to commence and complete clinical trials required to obtain regulatory approval to market our therapeutic and medical device products, and the results and timing of clinical and regulatory events of our products;

Our ability and the ability of our licensees to obtain additional FDA and foreign regulatory approval to market our products;

Our ability to successfully commercialize our product candidates;

Competition from products manufactured and sold or being developed by other companies;

The price of and demand for our products;

Our ability to obtain intellectual property protection for our product candidates;

Our ability to maintain our intellectual property rights including our ability to enforce patents and maintain trade secrets in the United States and in other countries;

Our ability to raise capital at times and in amounts needed to finance product development, clinical trials, and general operations; and

Our use of proceeds from this offering.

These risks are not exhaustive. Other sections of this prospectus supplement may include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements.

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,” “in,” “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. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus supplement. Readers are cautioned not to place undue reliance on these forward-looking statements. We undertake no duty to update or revise any forward-looking statements after the date of this prospectus supplement or to conform them to actual results, new information, future events or otherwise.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, or approximately \$ million if the underwriters exercise their option to purchase additional shares in full.

We intend to use the net proceeds for general corporate purposes, including, without limitation, to fund clinical trials of products we are developing, to finance our research and develop programs, and for general working capital. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds that we will have from the sale of the shares of common stock. Accordingly, our management will have broad discretion in the application of the net proceeds. We may also use proceeds of this offering to acquire one or more businesses or new business assets. We may invest proceeds in one or more of our existing subsidiaries or in any new subsidiaries that we may form. We may use the proceeds for purposes that are not contemplated at the time of the offering.

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DIVIDEND POLICY

We have never paid cash dividends on our common stock and we do not anticipate paying cash dividends in the foreseeable future, but intend to retain our capital resources for reinvestment in our business. Any future determination to pay cash dividends on our common 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.

We have in the past distributed common stock of a subsidiary to our shareholders, on a pro rata basis, as a dividend in kind. We may distribute shares of subsidiaries or affiliated companies again in the future, and any such distribution 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.

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DILUTION

If you purchase shares of our common stock 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 stock 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 shares of our common stock outstanding as of June 30, 2017.

Our historical net tangible book value at June 30, 2017 was \$170.1 million or \$1.53 per share. After giving effect to the sale of _____ shares of common stock in this offering at an offering price of \$ _____ per share, and after deducting estimated offering expenses, our adjusted net tangible book value as of June 30, 2017 would have been \$ _____ million, or \$ _____ per share. This represents an immediate increase in the net tangible book value of \$ _____ per share of our common stock to our existing shareholders and an immediate dilution in net tangible book value of \$ _____ per share to new investors. The following table illustrates per share dilution:

| | |
|---|--------|
| Public offering price per share | \$ |
| Net tangible book value per share as of June 30, 2017 | \$1.53 |
| Increase in net tangible book value per share attributable to this offering | \$ |
| As adjusted net tangible book value per share as of June 30, 2017, after giving effect to this offering | \$ |
| Dilution per share to new investors purchasing shares in this offering | \$ |

If the underwriters exercise in full their option to purchase _____ additional shares of our common stock at a public offering price of \$ _____ per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2017 would have been \$ _____ million or \$ _____ per share of common stock. This represents an immediate increase in as adjusted net tangible book value per share of \$ _____ per share to existing shareholders, and an immediate dilution of \$ _____ per share to investors participating in this offering.

The above discussion and table is based on 110,875,610 shares of our common stock issued and outstanding as of June 30, 2017, and excludes:

9,394,862 shares of common stock that may be issued upon exercise of warrants, at a weighted average exercise price of \$4.55 per share;

7,868,187 shares of common stock that may be issued upon exercise of options under our 2002 Stock Option Plan and our 2012 Equity Incentive Plan, with a weighted average exercise price of \$3.49 per share;

75,000 restricted stock units issued to our executive officers under our 2012 Equity Incentive Plan; and

7,795,006 shares of common stock available for future issuance under our 2002 Stock Option Plan and our 2012 Equity Incentive Plan.

In addition, as of June 30, 2017, up to \$25.0 million of common stock may be issued pursuant to our Controlled Equity OfferingSM Sales Agreement with Cantor Fitzgerald & Co., provided that no common stock may be issued prior to the expiration of the 90-day lock-up period following this offering.

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 those securities could result in further dilution to our shareholders.

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UNDERWRITING

We have entered into an underwriting agreement with the underwriters named below. Raymond James & Associates, Inc., or Raymond James, is acting as the sole book-running manager and representative of the underwriters. The underwriting agreement provides for the purchase of a specific number of shares of common stock by each of the underwriters. The underwriters' obligations are several, which means that each underwriter is required to purchase a specified number of shares of common stock, but is not responsible for the commitment of any other underwriter to purchase shares of common stock. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase the number of shares of common stock set forth opposite its name below:

| Underwriter | Number of Shares |
|----------------------------------|------------------------|
| Raymond James & Associates, Inc. | |
| Total | |

The underwriters have agreed to purchase all of the shares of common stock offered by this prospectus supplement (other than those covered by the over allotment option described below) if any are purchased.

The shares of common stock offered hereby should be ready for delivery on or about _____, 2017 against payment in immediately available funds.

The underwriters are offering the shares of common stock subject to various conditions and may reject all or part of any order. The representative of the underwriters has advised us that the underwriters propose to offer the common stock directly to the public at the public offering price that appears on the cover page of this prospectus supplement. In addition, the underwriters may offer some of the common stock to other securities dealers at such price less a concession of up to \$ _____ per share of common stock. After the shares of common stock are released for sale to the public, the representative may change the offering price and other selling terms at various times.

We have granted the underwriters the right to purchase up to an aggregate of _____ additional shares of our common stock. The underwriters may exercise this right, in whole or in part, at any time within 30 days following the date of this prospectus supplement to cover over allotments, if any. If the underwriters exercise the option in full, the total underwriting discount payable by us will be \$ _____, and the total proceeds to us, before expenses, will be \$ _____.

The following table provides information regarding the amount of the discounts and commissions to be paid to the underwriters by us, before expenses:

| | Per Share | Total Without Exercise of Over allotment Option | Total With Full Exercise of Over allotment Option |
|--|----------------------|--|--|
| Public offering price | \$ | \$ | \$ |
| Underwriting discounts and commissions | \$ | \$ | \$ |
| Proceeds, before expenses to us | \$ | \$ | \$ |

Certain of our existing significant shareholders, Broadwood Partners, L.P. and Broadwood Capital, Inc., both of which are affiliated with Neal Bradsher, a member of our Board of Directors, have submitted indications of interest to purchase shares of our common stock in this offering at the public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer or no shares in this offering to these shareholders, and the shareholders may determine to purchase more, fewer or no shares in this offering.

We estimate that our total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$ _____, which includes up to \$125,000 that we have agreed to reimburse the underwriters for the fees and expenses incurred by them in connection with the offering.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

We, our officers, directors and certain of our shareholders have agreed to a 90-day “lock-up” with respect to shares of our common stock and other of our securities that they beneficially own, including securities that are convertible into shares of common stock and securities that are exchangeable or exercisable for shares of common stock. This means that, subject to certain exceptions, for a period of 90 days following the date of this prospectus supplement, we and such persons may not offer, sell, pledge or otherwise dispose of these securities without the prior written consent of Raymond James.

Rules of the SEC may limit the ability of the underwriters to bid for or purchase shares before the distribution of the shares is completed. However, the underwriters may engage in the following activities in accordance with the rules:

Stabilizing transactions—The representative may make bids or purchases for the purpose of pegging, fixing or maintaining the price of the shares, so long as stabilizing bids do not exceed a specified maximum.

Over-allotments and syndicate covering transactions—The underwriters may sell more shares of our common stock in connection with this offering than the number of shares that they have committed to purchase. This over-allotment creates a short position for the underwriters. This short sales position may involve either “covered” short sales or “naked” short sales. Covered short sales are short sales made in an amount not greater than the underwriters’ over-allotment option to purchase additional shares in this offering described above. The underwriters may close out any covered short position either by exercising its over-allotment option or by purchasing shares in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market, as compared to the price at which they may purchase shares through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the shares that could adversely affect investors who purchase shares in this offering.

Penalty bids—If the representative purchases shares in the open market in a stabilizing transaction or syndicate covering transaction, it may reclaim a selling concession from the underwriters and selling group members who sold those shares as part of this offering.

Passive market making—Market makers in the shares who are underwriters or prospective underwriters may make bids for or purchases of shares, subject to limitations, until the time, if ever, at which a stabilizing bid is made.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales or to stabilize the market price of our common stock may have the effect of raising or maintaining the market price of our common stock or preventing or mitigating a decline in the market price of our common stock. As a result, the price of the shares of our common stock may be higher than the price that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of the shares if it discourages resales of the shares.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may occur on The NYSE American or otherwise. If such transactions are commenced, they may be discontinued without notice at any time.

Electronic Delivery of Prospectus Supplement: A prospectus supplement in electronic format may be delivered to potential investors by one or more of the underwriters participating in this offering. The prospectus supplement in electronic format will be identical to the paper version of such preliminary prospectus supplement. Other than the prospectus supplement in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus form a part.

NOTICE TO NON-U.S. INVESTORS

Investors are advised to contact their legal, financial or tax advisers to obtain an independent assessment of the financial and tax consequences of an investment in shares.

BELGIUM

The offering is exclusively conducted under applicable private placement exemptions and therefore it has not been and will not be notified to, and this document or any other offering material relating to the shares has not been and will not be approved by, the Belgian Banking, Finance and Insurance Commission (“Commission bancaire, financière et des assurances/Commissie voor het Bank, Financier en Assurantiewezen”). Any representation to the contrary is unlawful.

Each underwriter has undertaken not to offer sell, resell, transfer or deliver directly or indirectly, any shares, or to take any steps relating/ancillary thereto, and not to distribute or publish this document or any other material relating to the shares or to the offering in a manner which would be construed as: (a) a public offering under the Belgian Royal Decree of 7 July 1999 on the public character of financial transactions; or (b) an offering of securities to the public under Directive 2003/71/EC which triggers an obligation to publish a prospectus in Belgium. Any action contrary to these restrictions will cause the recipient and us to be in violation of the Belgian securities laws.

FRANCE

Neither this prospectus supplement nor any other offering material relating to the shares has been submitted to the clearance procedures of the Autorité des marchés financiers in France. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus supplement nor any other offering material relating to the shares has been or will be: (a) released, issued, distributed or caused to be released, issued or distributed to the public in France; or (b) used in connection with any offer for subscription or sale of the shares to the public in France. Such offers, sales and distributions will be made in France only: (i) to qualified investors (investisseurs qualifiés) and/or to a restricted circle of investors (cercle restreint d’investisseurs), in each case investing for their own account, all as defined in and in accordance with Articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French Code monétaire et financier; (ii) to investment services providers authorised to engage in portfolio management on behalf of third parties; or (iii) in a transaction that, in accordance with article L.411-2-II-1 -or-2 -or 3 of the French Code monétaire et financier and article 211-2 of the General Regulations (Règlement Général) of the Autorité des marchés financiers, does not constitute a public offer (appel public à l’épargne). Such shares may be resold only in compliance with Articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French Code monétaire et financier.

UNITED KINGDOM / GERMANY / NORWAY / THE NETHERLANDS

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a “Relevant Member State”) an offer to the public of any shares which are the subject of the offering contemplated by this prospectus supplement may not be made in that Relevant Member State other than the offers

contemplated in this prospectus supplement in name(s) of Member State(s) where prospectus will be approved or passported for the purposes of a non-exempt offer once this prospectus supplement has been approved by the competent authority in such Member State and published and passported in accordance with the Prospectus Directive as implemented in name(s) of relevant Member State(s) except that an offer to the public in that Relevant Member State of any shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to legal entities which are authorised or regulated to operate in the financial markets or, if not so authorised or regulated, whose corporate purpose is solely to invest in securities;

- (b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;

- (c) by the representative to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive); or

- (d) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall result in a requirement for the publication by the Company or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase any shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression “Prospectus Directive” means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

This prospectus supplement and any other material in relation to the shares is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospective Directive (“qualified investors”) that also (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, (ii) who fall within Article 49(2)(a) to (d) of the Order or (iii) to whom it may otherwise lawfully be communicated (all such persons together being referred to as “relevant persons”). The shares are only available to, and any invitation, offer or agreement to purchase or otherwise acquire such shares will be engaged in only with, relevant persons. This prospectus supplement and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this prospectus supplement or any of its contents.

ISRAEL

In the State of Israel, the shares offered hereby may not be offered to any person or entity other than the following:

(a) a fund for joint investments in trust (i.e., mutual fund), as such term is defined in the Law for Joint Investments in Trust, 5754-1994, or a management company of such a fund;

(b) a provident fund as defined in Section 47(a)(2) of the Income Tax Ordinance of the State of Israel, or a management company of such a fund;

(c) an insurer, as defined in the Law for Oversight of Insurance Transactions, 5741-1981, (d) a banking entity or satellite entity, as such terms are defined in the Banking Law (Licensing), 5741-1981, other than a joint services company, acting for their own account or for the account of investors of the type listed in Section 15A(b) of the Securities Law 1968;

(d) a company that is licensed as a portfolio manager, as such term is defined in Section 8(b) of the Law for the Regulation of Investment Advisors and Portfolio Managers, 5755-1995, acting on its own account or for the account of investors of the type listed in Section 15A(b) of the Securities Law 1968;

(e) a company that is licensed as an investment advisor, as such term is defined in Section 7(c) of the Law for the Regulation of Investment Advisors and Portfolio Managers, 5755-1995, acting on its own account;

(f) a company that is a member of the Tel Aviv Stock Exchange, acting on its own account or for the account of investors of the type listed in Section 15A(b) of the Securities Law 1968;

(g) an underwriter fulfilling the conditions of Section 56(c) of the Securities Law, 5728-1968;

(h) a venture capital fund (defined as an entity primarily involved in investments in companies which, at the time of investment, (i) are primarily engaged in research and development or manufacture of new technological products or processes and (ii) involve above-average risk);

(i) an entity primarily engaged in capital markets activities in which all of the equity owners meet one or more of the above criteria; and

(j) an entity, other than an entity formed for the purpose of purchasing shares in this offering, in which the shareholders equity (including pursuant to foreign accounting rules, international accounting regulations and U.S. generally accepted accounting rules, as defined in the Securities Law Regulations (Preparation of Annual Financial Statements), 1993) is in excess of NIS 250 million.

Any offeree of the shares offered hereby in the State of Israel shall be required to submit written confirmation that it falls within the scope of one of the above criteria. This prospectus supplement will not be distributed or directed to investors in the State of Israel who do not fall within one of the above criteria.

ITALY

The offering of the shares offered hereby in Italy has not been registered with the Commissione Nazionale per la Società e la Borsa, or CONSOB, pursuant to Italian securities legislation and, accordingly, the shares offered hereby cannot be offered, sold or delivered in the Republic of Italy, or Italy, nor may any copy of this prospectus supplement or any other document relating to the shares offered hereby be distributed in Italy other than to professional investors (operatori qualificati) as defined in Article 31, second paragraph, of CONSOB Regulation No. 11522 of 1 July, 1998 as subsequently amended. Any offer, sale or delivery of the shares offered hereby or distribution of copies of this prospectus supplement or any other document relating to the shares offered hereby in Italy must be made:

(a) by an investment firm, bank or intermediary permitted to conduct such activities in Italy in accordance with Legislative Decree No. 58 of 24 February 1998 and Legislative Decree No. 385 of 1 September 1993 (the “Banking Act”);

(b) in compliance with Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy; and

(c) in compliance with any other applicable laws and regulations and other possible requirements or limitations which may be imposed by Italian authorities.

SWEDEN

This prospectus supplement has not been nor will it be registered with or approved by Finansinspektionen (the Swedish Financial Supervisory Authority). Accordingly, this prospectus supplement may not be made available, nor may the shares offered hereunder be marketed and offered for sale in Sweden, other than under circumstances which are deemed not to require a prospectus under the Financial Instruments Trading Act (1991: 980).

SWITZERLAND

The shares being offered pursuant to this prospectus supplement will not be offered, directly or indirectly, to the public in Switzerland and this prospectus supplement does not constitute a public offering prospectus as that term is understood pursuant to art. 652a or art. 1156 of the Swiss Federal Code of Obligations. We have not applied for a listing of the shares being offered pursuant to this prospectus supplement on the SWX Swiss Exchange or on any other regulated securities market, and consequently, the information presented in this prospectus supplement does not necessarily comply with the information standards set out in the relevant listing rules. The shares being offered pursuant to this prospectus supplement have not been registered with the Swiss Federal Banking Commission as foreign investment funds, and the investor protection afforded to acquirers of investment fund certificates does not extend to acquirers of shares.

CANADA

Notice to Canadian Residents

This document constitutes an “exempt offering document” as defined in and for the purposes of applicable Canadian securities laws. No prospectus has been filed with any securities commission or similar regulatory authority in Canada in connection with the offer and sale of the securities described herein (the “Securities”). No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this document or on the merits of the Securities and any representation to the contrary is an offence.

Canadian investors are advised that this document has been prepared in reliance on section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (“NI 33-105”). Pursuant to section 3A.3 of NI 33-105, this document is exempt from the requirement to provide investors with certain conflicts of interest disclosure pertaining to “connected issuer” and/or “related issuer” relationships as would otherwise be required pursuant to subsection 2.1(1) of NI 33-105.

Resale Restrictions

The offer and sale of the Securities in Canada is being made on a private placement basis only and is exempt from the requirement to prepare and file a prospectus under applicable Canadian securities laws. Any resale of Securities acquired by a Canadian investor in this offering must be made in accordance with applicable Canadian securities laws, which may vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with Canadian prospectus requirements, a statutory exemption from the prospectus requirements, in a transaction exempt from the prospectus requirements or otherwise under a discretionary exemption from the prospectus requirements granted by the applicable local Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the Securities outside of Canada.

Representations of Purchasers

Each Canadian investor who purchases the Securities will be deemed to have represented to the issuer and to each dealer from whom a purchase confirmation is received, as applicable, that the investor (i) is purchasing as principal, or is deemed to be purchasing as principal in accordance with applicable Canadian securities laws, for investment only and not with a view to resale or redistribution; (ii) is an “accredited investor” as such term is defined in section 1.1 of National Instrument 45-106 *Prospectus Exemptions* (“NI 45-106”) or, in Ontario, as such term is defined in section 73.3(1) of the *Securities Act* (Ontario); and (iii) is a “permitted client” as such term is defined in section 1.1 of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*.

Taxation and Eligibility for Investment

Any discussion of taxation and related matters contained in this document does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a Canadian investor when deciding to purchase the Securities and, in particular, does not address any Canadian tax considerations. No representation or warranty is hereby made as to the tax consequences to a resident, or deemed resident, of Canada of an investment in the Securities or with respect to the eligibility of the Securities for investment by such investor under relevant Canadian federal and provincial legislation and regulations.

Rights of Action for Damages or Rescission

Securities legislation in certain of the Canadian jurisdictions provides certain purchasers of securities pursuant to an offering memorandum, including where the distribution involves an “eligible foreign security” as such term is defined in Ontario Securities Commission Rule 45-501 *Ontario Prospectus and Registration Exemptions* and in Multilateral Instrument 45-107 *Listing Representation and Statutory Rights of Action Disclosure Exemptions*, as applicable, with a remedy for damages or rescission, or both, in addition to any other rights they may have at law, where the offering memorandum, or other offering document that constitutes an offering memorandum, and any amendment thereto, contains a “misrepresentation” as defined under applicable Canadian securities laws. These remedies, or notice with respect to these remedies, must be exercised or delivered, as the case may be, by the purchaser within the time limits prescribed under, and are subject to limitations and defences under, applicable Canadian securities legislation. In addition, these remedies are in addition to and without derogation from any other right or remedy available at law to the investor.

Language of Documents

Upon receipt of this document, each Canadian investor hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the Securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur canadien confirme par les présentes qu’il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d’achat ou tout avis) soient rédigés en anglais seulement.*

LEGAL MATTERS

Cooley LLP, Palo Alto, California will pass upon the validity of the shares of common stock offered hereby. Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo P.C. of New York, New York, is acting as counsel for the underwriters in connection with this offering.

EXPERTS

OUM & Co. LLP, our independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016, and the effectiveness of our internal control over financial reporting as of December 31, 2016, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance on OUM & Co. LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

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

We are subject to the informational requirements of the Exchange Act, and in accordance therewith file quarterly, annual, and current reports and proxy statements and other information with the SEC. You may read and copy any materials we file with SEC at the SEC's Public Reference Room at 100 F Street N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of the site is <http://www.sec.gov>.

We make available free of charge on or through our Internet website www.biotimeinc.com, our Annual Reports 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.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This prospectus supplement is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. The SEC permits us to “incorporate by reference” the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement. Information that is incorporated by reference is considered to be part of this prospectus supplement and you should read it with the same care that you read this prospectus supplement and the accompanying prospectus. Information that we file later with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement, and will be considered to be a part of this prospectus supplement from the date those documents are filed.

We incorporate by reference the documents listed below, all filings filed by us pursuant to the Exchange Act after the date of the registration statement of which this prospectus supplement forms a part, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the time that all securities covered by this prospectus supplement have been sold; provided, however, that we are not incorporating any information furnished under either Item 2.02 or Item 7.01 of any current report on Form 8-K:

our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 16, 2017, and Amendment No.1 thereto, filed with the SEC on March 29, 2017;

the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2016 from our Definitive Proxy Statement on Schedule 14A filed with the SEC on May 1, 2017, as amended by Amendment No. 1 filed with the SEC on July 13, 2017;

our Quarterly Reports on Form 10-Q, for the three-month period ended March 31, 2017, filed with the SEC on May 10, 2017 and for the six-month period ended June 30, 2017, filed with the SEC on August 9, 2017;

our Current Reports on Form 8-K filed with the SEC on February 9, 2017, February 13, 2017, February 15, 2017, February 21, 2017, March 28, 2017 (only with respect to Item 8.01), April 4, 2017, April 11, 2017, June 8, 2017, June 16, 2017, July 6, 2017 as amended on August 14, 2017, August 17, 2017 and September 11, 2017; and

the description of our shares of common stock contained in our registration statement on Form 8-A (File No. 001-12830) filed with the SEC on October 26, 2009, including any amendment or report filed for the purpose of updating such description.

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

Any statement contained in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement 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 supplement.

We will provide to each person, including any beneficial holder, to whom a prospectus supplement is delivered, at no cost, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in the prospectus supplement but not delivered with the prospectus supplement. You should direct any requests for documents to BioTime, Inc., Attention: Secretary, 1010 Atlantic Avenue, Suite 102, Alameda, California 94501; 510-521-3390. Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference into this prospectus supplement and accompanying prospectus.

You should rely only on information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized anyone to provide you with information different from that contained in this prospectus supplement or the accompanying prospectus, or incorporated by reference in this prospectus supplement or the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We and the underwriters are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

PROSPECTUS

\$75,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Rights

Units

From time to time, we may offer and sell up to an aggregate of \$75,000,000 of any combination of the securities described in this prospectus, either individually or in combination. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

Our common stock is listed on the NYSE MKT and on the Tel Aviv Stock Exchange under the symbol "BTX." On May 1, 2017, the last reported sale price for our common stock on the NYSE MKT was \$3.27 per share.

Investing in these securities involves a high degree of risk. See "Risk Factors" on page 6 of this prospectus and in any applicable prospectus supplement and in the documents incorporated by reference herein and therein for a discussion of the factors you should carefully consider before deciding to invest in our securities.

We will provide the specific terms of any securities we may offer in supplements to this prospectus. You should read this prospectus and any accompany prospectus supplement carefully before you invest. This prospectus may not be used to offer and sell any securities unless accompanied by a prospectus supplement describing the amount of and

terms of the offering of those securities.

We may offer and sell the securities described in this prospectus to or through one or more underwriters, dealers or agents, or directly to purchasers on an immediate, continuous or delayed basis. The names of any underwriters, dealers or agents involved in the sale of any securities, the specific manner in which they may be offered and any applicable commissions or discounts will be set forth in an accompanying prospectus supplement covering the sales of those securities.

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

The date of this prospectus is May 5, 2017

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

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a “shelf” registration process. Under this shelf registration statement, we may from time to time sell any one or more, or a combination of, the securities described in this prospectus in one or more offerings for an aggregate offering price of up to \$75,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer and sell our securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. Each prospectus supplement may also add, update or change information contained in this prospectus and may include a discussion of any risk factors or other special considerations that apply to the offered securities.

Before making an investment decision, it is important for you to read and consider the information contained in this prospectus and any accompanying prospectus supplement, together with the additional information described under the heading “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” below.

This prospectus may not be used to offer to sell, solicit an offer to buy or consummate a sale of securities unless it is accompanied by a prospectus supplement. If there is any inconsistency between information in this prospectus and any accompanying prospectus supplement, you should rely on the information in the latest supplement and documents incorporated by reference herein and therein.

Unless the context otherwise requires, all references in this prospectus to “BioTime, Inc.” “BioTime,” the “Company,” “Registrant,” “we,” “us,” “our” and similar designations refer, collectively, to BioTime, Inc., a California corporation, and its consolidated subsidiaries.

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ABOUT BIOTIME, INC.

Business Overview

We are a clinical-stage biotechnology company focused on developing and commercializing products addressing degenerative diseases. Our clinical programs are based on two platform technologies: pluripotent stem cells and cell and drug delivery platform technologies. The foundation of our core therapeutic technology platform is pluripotent cells that are capable of becoming any of the cell types in the human body. The foundation of our cell delivery platform is our HyStem® cell and drug delivery matrix technology. Our current clinical programs are targeting three primary sectors: aesthetics, ophthalmology and cell and drug delivery.

We also have significant equity holdings in two publicly traded companies, Asterias Biotherapeutics, Inc., or Asterias, and OncoCyte Corporation, or OncoCyte, which we founded and which, until recently, were our majority-owned consolidated subsidiaries. Asterias (NYSE MKT: AST) is presently focused on advancing three clinical-stage programs that have the potential to address areas of very high unmet medical need in the fields of neurology (spinal cord injury) and oncology (Acute Myeloid Leukemia, or AML, and lung cancer). OncoCyte (NYSE MKT: OCX) is developing confirmatory diagnostic tests for lung cancer, breast cancer, and bladder cancer utilizing novel liquid biopsy technology. The combined market value of our holdings in Asterias and OncoCyte was about \$161 million as of March 31, 2017.

We are also enabling early-stage programs in new technologies through our own research programs as well as through our subsidiaries and affiliates. These technologies have the potential to improve the treatment of diseases associated with aging, including diseases such as diabetes, and cardiovascular and metabolic disorders that affect large numbers of people. We are also researching other novel technologies that may help the body regenerate certain types of degenerated cells and tissues.

Together with our subsidiaries and affiliates, we currently have seven product candidates in human clinical trials, one of which is in a late-stage, pivotal study in Europe, one cancer diagnostic that is expected to be commercially launched in the U.S. during the second half of 2017 and several early-stage programs that may help address some of the biggest unmet medical needs faced by our aging population.

In addition, we have obtained a collection of pluripotent stem cell assets and a proprietary therapeutic delivery platform with many potential uses. Pluripotent stem cells are capable of becoming any of the cell types in the human body. Cell types derived from pluripotent stem cells have potential applications in many areas of medicine with large unmet patient needs, including various tissue injuries and age-related degenerative diseases and degenerative conditions for which there presently are no cures. Unlike pharmaceuticals which almost always require a molecular target, cell therapy strategies use cell types derived from pluripotent stem cells to regenerate, replace or augment affected cells and tissues, and therefore may have broader applicability and impact than traditional pharmaceutical products. Our pluripotent stem cell technology is complemented by our HyStem® technology, which includes a family of unique, biocompatible resorbable hydrogels to deliver bioactive compositions for therapeutic benefit. HyStem® was designed to enable the effective transfer, engraftment and metabolic support for cells, whether derived from pluripotent stem cells or from a patient's own somatic or adult stem cells. The flexibility of the HyStem® technology also allows for direct therapeutic use and the sustained delivery of therapeutics.

Our near term therapeutic focus is in three core areas of aesthetics, ophthalmology, and cell and drug delivery. In addition, we, through our subsidiaries and affiliates, also focus on therapeutic products in neurology and oncology and liquid biopsies for diagnosis of cancer.

Facial Aesthetics

Renevia®, our lead facial aesthetics product, is a potential treatment for facial lipoatrophy. “Lipoatrophy” is another word for “fat loss or deficiency.” It is currently in a pivotal clinical trial in Europe to assess its safety and efficacy in restoring normal skin contours in patients whose subcutaneous fat, or adipose tissue, has been lost due to the use of certain drugs often used to treat patients with HIV. While this pivotal trial, if successful, is expected to enable a filing for marketing authorization in the European Union, we see this trial as supportive of U.S. development of Renevia®, for a much larger market opportunity, for treating additional forms of facial volume restorations, whether from drugs, trauma or aging. Renevia® consists of our cell-transplantation delivery matrix (HyStem®) combined with the patient’s own adipose progenitor cells. Developed as an alternative for traditional fat transfer procedures, Renevia® is designed to mimic the naturally-occurring extracellular matrix and provide a 3-D scaffold that enables effective cell transplant, engraftment and proliferation. Renevia®, is being developed with the goal of providing a natural, long-lasting improvement to the patient’s skin contouring.

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Ophthalmology

OpRegen® is our lead product for ophthalmological disorders. It is a suspension of retinal pigment epithelial, or RPE, cells that are derived from pluripotent stem cells. RPE cells form the back lining of the retina, and support the function of photoreceptors (rods and cones). RPE cells can be damaged and lost in various forms of retinal degeneration. The OpRegen® therapeutic approach is to replace damaged or lost RPE cells and possibly slow disease progression and/or preserve or restore visual function. It is currently in a Phase I/IIa clinical trial for the treatment of the dry form of age-related macular degeneration, or AMD. AMD affects approximately 1.6 million newly diagnosed people annually in the U.S. and is the leading cause of blindness in people over the age of 60. Approximately 90 percent of AMD patients suffer from the dry form, for which the U.S. Food and Drug Administration, or FDA, has not approved any therapies.

In February 2017, we expanded our ophthalmology portfolio through the acquisition of exclusive global rights to technology from University of Pittsburgh through the execution of an exclusive license agreement. This technology allows the generation of three-dimensional laminated human retinal tissue derived from human pluripotent stem cells. This tissue contains all the cell types and layers of the human retina and has shown evidence of functional integration in proof of concept animal models for advanced retinal degeneration. The technology is being developed for implantation in patients to potentially treat or prevent a variety of retinal degenerative diseases.

Cell and Drug Delivery

In addition to Renevia®, we have two additional primary programs utilizing our proprietary HyStem® technology. HyStem®-BDNF is a preclinical development program for the delivery of recombinant human brain-derived neurotrophic factor, or BDNF, directly into the stroke cavity of patients with the goal of aiding in tissue repair and functional recovery. ReGlyde™ is in preclinical development as a device for viscosupplementation and a combination product for drug delivery in osteoarthritis, or OA. The viscosupplementation device program aims to administer ReGlyde™ directly into affected OA joints provide joint lubrication to reduce pain and improve quality of life. The drug delivery programs seek to enable the sustained release of therapeutics in affected OA joints to slow or reverse disease progression, in addition to improving pain and joint function. Also, included in our delivery platform is Premvia™, which is a HyStem® hydrogel formulation for the management of wounds including partial and full-thickness wounds, ulcers, tunneled/undermined wounds, surgical wounds, and burns. Premvia™ was cleared by the FDA via a 510(k) device approval pathway.

In addition to these programs, we are developing HyStem® product enhancements. Current efforts are focused on the development of a frozen liquid product format, which, if successful, will make significant improvements in end-user convenience.

Therapeutic Products in Neurology and Oncology

Asterias is presently focused on advancing three clinical-stage programs, which have the potential to address areas of very high unmet medical need in the fields of neurology and oncology. Asterias' lead products are:

- AST-OPC1, a therapy derived from pluripotent stem cells that is currently in a Phase I/IIa clinical trial for spinal cord injuries, with positive early efficacy data reported in September 2016;

- AST-VAC1, a patient-specific cancer immunotherapy with promising Phase II clinical trial data in AML; and

- AST-VAC2, a non-patient specific cancer immunotherapy for which the initiation of a Phase I/IIa clinical trial in non-small cell lung cancer is planned for the first half of 2017.

Liquid Biopsies for Diagnosis of Cancer

OncoCyte is developing confirmatory diagnostic tests for lung cancer, breast cancer, and bladder cancer utilizing novel liquid biopsy technology. While current biopsy tests use invasive surgical procedures to provide tissue samples to determine if a tumor is benign or malignant, OncoCyte is developing a next generation of diagnostic tests that will be based on liquid biopsies using blood or urine samples. OncoCyte recently conducted a 300-patient study of its lung cancer test. On March 6, 2017, OncoCyte announced the successful completion of the study.

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Our Subsidiaries and Our Affiliates

The following table shows our subsidiaries and affiliates, their respective principal fields of business, our percentage ownership, directly and through subsidiaries, as of December 31, 2016, and the country where their principal business is located:

| Subsidiaries and Affiliates | Field of Business | BioTime Ownership | Country |
|-----------------------------------|--|-------------------|-----------|
| Cell Cure Neurosciences Ltd. | Products to treat age-related macular degeneration | 62.5%(1) | Israel |
| ES Cell International Pte. Ltd. | Stem cell products for research, including clinical grade cell lines produced under cGMP | 100% | Singapore |
| LifeMap Sciences, Inc. | Biomedical, gene, disease, and stem cell databases and tools | 77.9% | USA |
| OncoCyte Corporation(2) | Cancer diagnostics | 51.1% | USA |
| OrthoCyte Corporation | Developing bone grafting products for orthopedic diseases and injuries | | USA |
| ReCyte Therapeutics, Inc. | Research and development involved in stem cell-derived endothelial and cardiovascular related progenitor cells for the treatment of vascular disorders, ischemic conditions and brown adipocytes for type-2 diabetes and obesity | 94.8% | USA |
| Asterias Biotherapeutics, Inc.(3) | Therapeutic products derived from pluripotent stem cells, and immunotherapy products. Clinical programs include: AST-OPC1 for spinal cord injury, AST-VAC1 for acute myelogenous leukemia, and AST-VAC2 for non-small cell lung cancer | 46% | USA |

(1) Includes shares owned by us and ES Cell International Pte. Ltd. Does not include shares that would be owned by us, if we were to convert certain convertible debt into Cell Cure Neurosciences Ltd. ordinary shares.

(2) As of February 17, 2017, we deconsolidated OncoCyte and OncoCyte is no longer a subsidiary of ours as of that date, but remains an affiliate and significant investee of our company.

(3) Since the deconsolidation of Asterias in May 2016, Asterias is an affiliate and significant investee of our company.

We presently own, directly and through our subsidiary ES Cell International Pte. Ltd., approximately 62.5% of the outstanding ordinary shares of Cell Cure Neurosciences Ltd., or Cell Cure. We also hold certain Cell Cure convertible promissory notes that entitle us to acquire additional Cell Cure ordinary shares by converting those notes into ordinary shares. If we were to convert the convertible promissory notes into Cell Cure ordinary shares, and if no other ordinary shares are issued to third parties, our percentage ownership of Cell Cure would increase to 82.3%, based on the number of ordinary shares outstanding on February 28, 2017. In addition, as of March 9, 2017, we owned 77.9% of the common stock outstanding of LifeMap Sciences, Inc.

We will continue to work on simplifying our corporate, financial and organizational structure to allow us to execute our objectives more efficiently, while also making it much easier for investors, and other external stakeholders, to better understand our company. Our purpose is to deliver therapies for significant unmet, or under-met, needs to patients, while creating value for our investors. We believe that we have several valuable assets within our company, our subsidiaries and our affiliates.

Company Information

We were incorporated in the State of California on November 30, 1990. Our common stock is listed on the NYSE MKT and the Tel Aviv Stock Exchange under the symbol "BTX." The address of our principal executive office is 1010 Atlantic Avenue, Suite 102, Alameda, California 94501, and our phone number at that address is (510) 521-3390. Our corporate website address is www.biotimeinc.com. The information contained on our website is not a part of, and should not be construed as being incorporated by reference into, this prospectus.

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RISK FACTORS

Investing in our securities involves significant risks. Before deciding whether to invest in our securities, you should consider carefully the risks, uncertainties and assumptions described in this prospectus and any accompanying prospectus supplement, including the risk factors set forth in our filings with the SEC that are incorporated by reference herein and therein, including the risk factors in our most recent Annual Report on Form 10-K, as revised or supplemented by our Quarterly Reports on Form 10-Q, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. Please also read carefully the section below entitled “Cautionary Note Regarding Forward-Looking Statements.”

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements reflect management's beliefs and assumptions. In addition, these forward-looking statements reflect management's 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," "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.

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

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USE OF PROCEEDS

Unless otherwise specified in an accompanying prospectus supplement, we intend to use the net proceeds from the sale of our securities offered by this prospectus for general corporate purposes, including, without limitation, working capital, capital expenditures, research and development expenditures, regulatory affairs expenditures, clinical trial expenditures, acquisitions of new technologies and businesses, and investments in our subsidiaries or otherwise. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds we will have upon completion of this offering. Accordingly, our management will have broad discretion in the application of the net proceeds, if any.

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DIVIDEND POLICY

We have never paid cash dividends on our common stock and we do not anticipate paying cash dividends in the foreseeable future, but intend to retain our capital resources for reinvestment in our business. Any future determination to pay cash dividends on our common 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 our Board of Directors deems relevant.

We have in the past distributed common stock of a subsidiary to our shareholders, on a pro rata basis, as a dividend in kind. We may distribute shares of subsidiaries or affiliated companies again in the future and any such distribution 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 our Board of Directors deems relevant.

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RATIO OF EARNINGS TO FIXED CHARGES AND RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table sets forth the computation of our ratio of earnings to fixed charges and our ratio of earnings to combined fixed charges and preferred stock dividends for the periods presented. The following table is qualified by the more detailed information appearing in the computation table set forth in Exhibit 12.1 to the Registration Statement of which this prospectus is part and our historical consolidated financial statements, including the notes to those consolidated financial statements, incorporated by reference in this prospectus. You should read this table in conjunction with the consolidated financial statements and notes incorporated by reference in this prospectus.

| | Years Ended December 31, (in thousands) | | | | |
|---|--|------------|------------|------------|------------|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| Deficiency in earnings required to cover fixed charges | \$(11,069) | \$(62,615) | \$(51,155) | \$(56,190) | \$(25,306) |
| Ratio of earnings to fixed charges ⁽¹⁾ | - | - | - | - | - |
| Deficiency in earnings required to cover combined fixed charges and preferred stock dividends | \$(11,069) | \$(63,030) | \$(51,242) | \$(56,190) | \$(25,306) |
| Ratio of earnings to fixed charges and preferred dividends ⁽¹⁾ | - | - | - | - | - |

⁽¹⁾ We did not record earnings for the years ended 2012 through 2016. Accordingly, our earnings were insufficient to cover fixed charges and combined fixed charges and preferred stock dividends for those periods.

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DESCRIPTION OF CAPITAL STOCK

The following information describes our common stock and preferred stock, as well as certain provisions of our articles of incorporation and bylaws. This summary does not purport to be complete and is qualified in its entirety by the provisions of our articles of incorporation and bylaws, copies of which have been filed as exhibits to the registration statement of which this prospectus is a part.

Authorized Capital Stock

We are currently authorized to issue an aggregate of 152,000,000 shares of capital stock consisting of 150,000,000 shares of common stock and 2,000,000 shares of preferred stock. There are no shares of preferred stock issued or outstanding. As of March 31, 2017, we had 110,853,742 shares of our common stock issued and outstanding. As of March 31, 2017, there were 15,210 holders of our common stock.

Common Stock

Each holder of our common stock is entitled to one vote for each outstanding share of common stock owned by the holder on every matter properly submitted to the shareholders for their vote. Subject to the dividend rights of holders of any shares of preferred stock that may be issued from time to time, holders of common stock are entitled to any dividend declared by our Board of Directors out of funds legally available for that purpose. We have not paid any cash dividends on our common stock, and it is unlikely that any cash dividends will be declared or paid on any common stock 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 stock that may be issued, holders of our common stock are entitled to receive on a pro rata basis all of our remaining assets available for distribution to the holders of our common stock in the event of the liquidation, dissolution, or winding up of our operations. Holders of our common stock do not have any preemptive rights to become subscribers or purchasers of additional shares of any class of our capital stock. There are no redemption or sinking fund provisions applicable to our common stock.

Preferred Stock

We may issue preferred stock in one or more series, at any time, with such rights, preferences, privileges and restrictions as our Board of Directors may determine, all without further action of our shareholders. Any series of preferred stock which may be authorized by our Board of Directors in the future may be senior to and have greater rights and preferences than our common stock and may have restrictions on the repurchase or redemption of shares by us.

Anti-takeover Provisions of our Articles of Incorporation and Bylaws and California Law

Our articles of incorporation and bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our company, including the following:

Authorized Capital. The issuance of shares of capital stock, or the issuance of rights to purchase shares of capital stock, could be used to discourage an attempt to obtain control of our company. For example, if, in the exercise of its fiduciary obligations, our Board of Directors determined that a takeover proposal was not in the best interest of our shareholders, our Board of Directors could authorize the issuance of preferred stock or common stock without shareholder approval. The shares could be issued in one or more transactions that might prevent or make the completion of the change of control transaction more difficult or costly by:

- diluting the voting or other rights of the proposed acquirer or insurgent shareholder group;

creating a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent board; or

·effecting an acquisition that might complicate or preclude the takeover.

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In this regard, our articles of incorporation grant our Board of Directors broad power to establish the rights and preferences of the authorized and unissued preferred stock. Our Board of Directors could establish one or more series of preferred stock that entitle holders to:

- vote separately as a class on any proposed merger or consolidation;
- cast a proportionately larger vote together with our common stock on any transaction or for all purposes;
- elect directors having terms of office or voting rights greater than those of other directors;
- convert preferred stock into a greater number of shares of our common stock or other securities;
- demand redemption at a specified price under prescribed circumstances related to a change of control of our company; or
- exercise other rights designed to impede a takeover.

Alternatively, a change of control transaction deemed by our Board of Directors to be in the best interest of our shareholders could be facilitated by issuing a series of preferred stock having sufficient voting rights to provide a required percentage vote of the shareholders.

Advance Notice Requirements for Shareholder Proposals and Director Nominations. Our bylaws provide advance notice procedures for shareholders seeking to bring business before our annual meeting of shareholders, or to nominate candidates for election as directors at any meeting of shareholders. Our bylaws also specify certain requirements regarding the form and content of a shareholder's notice. These provisions may preclude our shareholders from bringing matters before our annual meeting of shareholders or from making nominations for directors at our meetings of shareholders.

Meetings of Shareholders. Our bylaws provide that only our Board of Directors, the Chairman of our Board of Directors, the President of our company and any one or more shareholders holding at least 10% of the voting power of our company may call special meetings of shareholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of shareholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Amendment of Articles of Incorporation and Bylaws. The affirmative vote of holders of a majority of the voting power of our outstanding shares of stock will generally be able to amend other provisions of our articles of incorporation and the holders of a majority of the voting power present and entitled to vote will generally be able to amend other provisions of our bylaws. Certain provisions of our bylaws, such as the reduction in the fixed amount of the authorized number of directors, may be amended unless if the votes cast against its adoption are equal to more than 16 2/3% of the outstanding shares entitled to vote. This will have the effect of making it more difficult to amend our articles of incorporation or bylaws to remove or modify these provisions.

These provisions of our articles of incorporation and bylaws could make it more difficult to acquire control of us by means of a tender offer, merger, proxy contest or otherwise. Accordingly, these provisions could have the effect of discouraging coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection give us the potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us, and that the benefits of this increased protection outweigh the disadvantages of discouraging those proposals, because negotiation of those proposals could result in an improvement of their terms.

Limitation of Liability and Indemnification of Directors and Officers

Our articles of incorporation provide for the elimination of liability for our directors to the fullest extent permissible under California law. Section 204 of the California Corporations Code, or the California Code, provides that a corporation's articles of incorporation may not limit the liability of directors (i) for acts or omissions that involve intentional misconduct or a knowing and culpable violation of law, (ii) for acts or omissions that a director believes to be contrary to the best interests of the corporation or its shareholders or that involve the absence of good faith on the part of the director, (iii) for any transaction from which a director derived an improper personal benefit, (iv) for acts or omissions that show a reckless disregard for the director's duty to the corporation or its shareholders in circumstances in which the director was aware, or should have been aware, in the ordinary course of performing a director's duties, of a risk of a serious injury to the corporation or its shareholders, (v) for acts or omissions that constitute an unexcused pattern of inattention that amounts to an abdication of the director's duty to the corporation or its shareholders, (vi) under Section 310 of the California Code (concerning transactions between corporations and directors or corporations having interrelated directors) or (vii) under Section 316 of the California Code (concerning directors' liability for distributions, loans, and guarantees).

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Our bylaws require us to indemnify our directors and officers to the maximum extent not prohibited by the California Code and will authorize us to indemnify other employees and agents to the extent and in the manner permitted by the California Code.

In addition, we enter into indemnification agreements with each of our directors and officers. These agreements, among other things, will require us to indemnify and advance expenses to our directors, executive officers and other key employees for certain losses, including attorneys' fees, judgments, penalties fines and settlement amounts actually and reasonably incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request. We believe that these charter provisions and indemnification agreements are necessary to attract and retain qualified persons such as directors, officers and key employees. We also maintain directors' and officers' liability insurance under which our directors and officers are insured against loss as a result of certain claims brought against them in such capacities.

Listing

Our common stock is listed on the NYSE MKT and on the Tel Aviv Stock Exchange under the symbol "BTX."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 620 115th Avenue, Brooklyn, New York 11219.

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DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in an applicable prospectus supplement. The terms of any debt securities offered under any applicable prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the Securities and Exchange Commission, or the SEC.

The following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read any applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities,” which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with “original issue discount,” or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. One or more series of debt securities may be variable rate debt securities that may be exchanged for fixed rate debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in any applicable prospectus supplement.

We will comply with Section 14(e) under the Exchange Act to the extent applicable, and any other tender offer rules under the Exchange Act, which may then be applicable, in connection with any obligation we may have to purchase debt securities at the option of the holders thereof. Any such obligation applicable to a series of debt securities will be described in any applicable prospectus supplements.

Any applicable prospectus supplement relating to a series of debt securities being offered will contain the following terms, if applicable:

- the title of the series of debt securities and the ranking;

- the aggregate principal amount and any limit on that amount;
- the price at which the debt securities will be issued;
- the date on which the debt securities mature;
- the fixed or variable rate at which the debt securities will bear interest, or the method by which the rate shall be determined;
- the timing, place and manner of making principal, interest and any premium payments on the debt securities, and, if applicable, where the debt securities may be surrendered for registration of transfer or exchange;
- the date or dates, if any, after which the debt securities may be converted or exchanged into or for our common stock or another company's securities or property or cash, and the terms of any such conversion or exchange;
- any redemption or early repayment provisions;

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- any sinking fund or similar provisions;
- the authorized denominations;
- any applicable subordination provisions;
- any guarantees of the securities by our subsidiaries or others;
- the currency in which we will pay the principal, interest and any premium payments on the debt securities;
- whether the amount of payments of principal of (and premium, if any) or interest, if any, on the debt securities may be determined with reference to an index, formula or other method and the manner in which the amounts shall be determined;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof
- the time period within which, the manner in which and the terms and conditions upon which the purchaser of the securities can select the payment currency;
- the provisions, if any, granting special rights to the holders of debt securities upon certain events;
- any additions to or changes in the events of default or covenants with respect to the debt securities, and any change in the right of the trustee or the holders, from those described in this prospectus, to declare principal, premium and interest to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance
- additions to or changes in the provisions relating to satisfaction and discharge of the indenture
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture
- whether and under what circumstances we will pay any additional amounts on the debt securities for any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities instead of paying those amounts;
- the form (registered and/or bearer securities), any restrictions applicable to the offer, sale or delivery of bearer securities and the terms, if any, upon which bearer securities may be exchanged for registered securities and vice versa;
- the date of any bearer securities or any global security, if other than the date of original issuance of the first security of the series to be issued;
- the person to whom and manner in which any interest shall be payable;
- whether the securities will be issued in whole or in part in the form of one or more global securities;
- the identity of the depositary for global securities;

· whether a temporary security is to be issued with respect to the series and whether any interest payable prior to the issuance of definitive securities of the series will be credited to the account of the persons entitled thereto;

· the terms upon which beneficial interests in a temporary global security may be exchanged in whole or in part for beneficial interests in a definitive global security or for individual definitive securities and the terms upon which exchanges may be made;

· the securities exchange(s), if any, on which the securities will be listed;

· whether any underwriter(s) will act as market maker(s) for the securities;

· the form (certificated or book-entry);

· the form and/or terms of certificates, documents or conditions which may be necessary, if any, for the debt securities to be issuable in final form; and

· additional terms not inconsistent with the provisions of the indenture.

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Conversion or Exchange Rights

We will set forth in any applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Except as set forth in any applicable prospectus supplement, the indenture will provide that we shall not consolidate with, or sell, assign, transfer, lease or convey all or substantially all of our assets to, or merge into, another business entity, unless:

we are the surviving entity or, in the event that we are not the surviving entity, the entity formed by the transaction (in a consolidation) or the entity which received the transfer of assets is organized under the laws of any state of the United States or the District of Columbia and that the entity assumes all of our obligations under the debt securities and the indenture; and

immediately after giving effect to the transaction, no event of default, as defined in the indenture, shall have occurred and be continuing.

Notwithstanding the foregoing, we may merge with another business entity or acquire by purchase or otherwise all or any part of the property or assets of any other company in a transaction in which we are the surviving entity.

Events of Default

Unless otherwise specified in any applicable prospectus supplement, the following are events of default with respect to any series of debt securities issued under the indenture:

failure to pay principal of any debt security of that series when due and payable at maturity, upon acceleration, redemption or otherwise;

failure to pay any interest on any debt security of that series when due, and the default continues for 30 days;

failure to make sinking fund payments when due;

failure to comply with any covenant or warranty contained in the indenture, other than covenants or warranties contained in the indenture solely for the benefit of other series of debt securities, and the default continues for 30 days after notice from the trustee or the holders of at least 25% in principal amount of the then outstanding debt securities of that series;

certain events of bankruptcy, insolvency or reorganization; and

any other event of default provided with respect to that particular series of debt securities.

If an event of default occurs and continues, then upon written notice to us the trustee or the holders of at least 25% in principal amount of the outstanding debt securities of that series may declare the unpaid principal amount of and any accrued and unpaid interest on, all debt securities of that series to be due and payable immediately. However, at any time after a declaration of acceleration with respect to debt securities of any series has been made, the holders of a

majority in principal amount of the outstanding debt securities of that series may rescind and annul the acceleration:

if all events of default other than the nonpayment of principal of or interest on the debt securities of that series which have become due solely because of the acceleration have been waived or cured; and

the rescission would not conflict with any judgment or decree of a court of competent jurisdiction. For information as to waiver of defaults, see “Modification of Indenture; Waiver” below.

The indenture will provide that, subject to the duty of the trustee during an event of default to act with the required standard of care, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any of the holders, unless the holders shall have offered to the trustee reasonable security or indemnity. Subject to certain provisions, including those requiring security or indemnification of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series.

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We will be required to furnish to the trustee under the indenture annually a statement as to the performance by us of our obligations under that indenture and as to any default in our performance.

Modification of Indenture; Waiver

Subject to certain exceptions, the terms of the indenture or the debt securities may be amended or supplemented by us and the trustee with the written consent of the holders of at least a majority in principal amount of the outstanding debt securities of each series affected by the amendment with each series voting as a separate class. Without the consent of any holder of the debt securities, we and the trustee may amend the terms of the indenture or the debt securities to:

- cure any ambiguity, defect or inconsistency;
- provide for the assumption of our obligations to holders of the debt securities by a successor corporation;
- provide for uncertificated debt securities in addition to certificated debt securities;
- make any change that does not adversely affect the rights of any holder of the debt securities in any material respect;
- add to, change or eliminate any other provisions of the indenture in respect of one or more series of debt securities if the change would not (i) apply to any security of any series created prior to the execution of a supplemental indenture and entitled to the benefit of the provision, and (ii) modify the rights of the holder of any security or would become effective only when there is no outstanding security of any series created prior to the execution of the supplemental indenture and entitled to the benefits of the provisions proposed to be changed;
- establish any additional series of debt securities; or
- comply with any requirement of the SEC in connection with the qualification of the indenture under the Trust Indenture Act.

However, holders of each series of debt securities affected by a modification must consent to modifications that have the following effect:

- reduce the principal amount of the debt securities;
- reduce the rate or change the time for payment of interest;
- change the fixed maturity date;
- change the date on which any debt security may be subject to redemption or repurchase, or reduce the redemption or repurchase price;
- make any debt security payable in currency other than that stated in the debt security;
- waive any existing default or event of default and the resulting consequences;
- modify the right of any holder to receive payment of principal or interest on any debt security;
- impair the right of any holder to institute suit for the enforcement of any payment due; or
- make any change in the foregoing amendment provisions which require each holder's consent.

Any existing default may be waived with the consent of the holders of at least a majority in principal amount of the then outstanding debt securities of the series affected. The consent of the holders of debt securities is not necessary to approve the particular form of any proposed amendment to any indenture. It is sufficient if any consent approves the substance of the proposed amendment.

Covenants

Except as permitted under “Consolidation, Merger or Sale” the indenture will require us to do or cause to be done all things necessary to preserve and keep in full force and effect our existence, rights (declaration and statutory) and franchises; provided, however, that we shall not be required to preserve any right or franchise if we determine that the right or franchise is no longer desirable in the conduct of our business and that the loss of the right or franchise is not disadvantageous in any material respect to the holders of the debt securities.

The indenture will require us to pay or discharge or cause to be paid or discharged, before payment becomes delinquent, all taxes, assessments and governmental charges levied or imposed upon us, except any tax, assessment, charge or claim the amount or applicability of which is being contested in good faith.

Reference is made to the indenture and applicable prospectus supplement for information with respect to any additional covenants specific to a particular series of debt securities.

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Discharge

Except as otherwise set forth in any applicable prospectus supplement, we may terminate our obligations under the debt securities of any series, and the corresponding obligations under the indenture when:

- we have paid or deposited with the trustee funds or United States government obligations in an amount sufficient to pay at maturity all outstanding debt securities of the series, including interest other than destroyed, lost or stolen debt securities of the series which have not been replaced or paid;
- all outstanding debt securities of the series have been delivered (other than destroyed, lost or stolen debt securities of the series which have not been replaced or paid) to the trustee for cancellation; or
- all outstanding debt securities of any series have become due and payable; and
- we have paid all other sums payable under the indenture.

In addition, we will have the option to terminate substantially all our obligations under the debt securities of any series and the corresponding obligations under the indenture, and we may exercise that option if:

- we have paid or deposited with the trustee, in trust an amount of cash or United States government obligations sufficient to pay all outstanding principal of and interest on the then outstanding debt securities of the series at maturity or upon their redemption, as the case may be;
- the deposit will not result in a breach of, or constitute a default under, the indenture;
- no default or event of default shall have occurred and continue on the date of deposit and no event of default as a result of a bankruptcy or event which with the giving of notice or the lapse of time would become a bankruptcy event of default shall have occurred and be continuing on the 91st day after that date;
- we deliver to the trustee a legal opinion that we have received from, or there has been published by, the United States Internal Revenue Service a ruling, or there has been a change in tax law, in either case to the effect that the holders of the debt securities of the series will not recognize income, gain or loss for Federal income tax purposes as a result of our exercise of our option and shall be subject to Federal income tax on the same amounts and in the same manner and at the same times as would have been the case if we did not exercise our option; and
- certain other conditions are met.

We will have the option to be released from our obligations with respect to the covenants to deliver reports required to be filed with the SEC and an annual compliance certificate, and to make timely payments of taxes (including covenants described in an applicable prospectus supplement), and any event of default occurring because of a default with respect to the covenants as they related to any series of debt securities, and we may exercise that option if:

- we deposit or cause to be deposited with the trustee in trust an amount of cash or United States government obligations sufficient to pay and discharge when due the entire unpaid principal of and interest on all outstanding debt securities of any series;
- the deposit will not result in a breach of, or constitute a default under, the indenture;
- no default or event of default shall have occurred and be continuing on the date of deposit and no event of default as a result of a bankruptcy or event which with the giving of notice or the lapse of time would become a bankruptcy event

of default shall have occurred and be continuing on the 91st day after that date;

we deliver to the trustee a legal opinion that the holders of the debt securities of the series will not recognize income, gain or loss for Federal income tax purposes as a result of our exercise of our option and shall be subject to Federal income tax on the same amounts and in the same manner and at the same times as would have been the case if we did not exercise our option; and

·certain other conditions are met.

Upon satisfaction of the applicable conditions, our obligations under the indenture with respect to the debt securities of the series, other than with respect to the covenants and events of default referred to above, shall remain in full force and effect.

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Notwithstanding the foregoing, no discharge or defeasance described above shall affect the following obligations to or rights of the holders of any series of debt securities:

- rights of registration of transfer and exchange of debt securities of the series;
- rights of substitution of mutilated, defaced, destroyed, lost or stolen debt securities of the series;
- rights of holders of debt securities of the series to receive payments of principal thereof and premium, if any, and interest thereon when due;
- rights, obligations, duties and immunities of the trustee;
- rights of holders of debt securities of the series as beneficiaries with respect to property deposited with the trustee and payable to all or any of them; and
- our obligations to maintain an office or agency in respect of the debt securities of the series.

Form, Exchange and Transfer

We expect payment of principal, premium, if any, and any interest on the debt securities to be payable, and the exchange and the transfer of debt securities will be registrable, at the office of the trustee or at any other office or agency we maintain for that purpose. We expect to issue debt securities in denominations of U.S. \$1,000 or integral multiples of \$1,000. No service charge will be made for any registration of transfer or exchange of the debt securities, but we may require a payment to cover any tax or other governmental charges payable in connection with an exchange or transfer.

A holder of debt securities may transfer or exchange those debt securities in accordance with the indenture. The registrar for the debt securities may require a holder, among other things, to furnish appropriate endorsements and transfer documents, and to pay any taxes and fees required by law or permitted by the indenture. The registrar is not required to transfer or exchange any debt security selected for redemption or any debt security for a period of 15 days before a selection of debt security to be redeemed. The registered holder of a debt security may be treated as the owner of the security for all purposes.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

Replacement Securities

Any mutilated certificate representing a debt security or a certificate representing a debt security with a mutilated coupon will be replaced by us at the expense of the holder upon surrender of the certificate to the trustee. Certificates representing debt securities or coupons that become destroyed, stolen or lost will be replaced by us at the expense of the holder upon delivery to us and the trustee of evidence of any destruction, loss or theft satisfactory to us and the trustee, provided that neither we nor the trustee has been notified that the certificate or coupon has been acquired by a bona fide purchaser. In the case of any coupon which becomes destroyed, stolen or lost, the coupon will be replaced by issuance of a new certificate representing the debt security in exchange for the certificate representing the debt security to which the coupon appertains. In the case of a destroyed, lost or stolen certificate representing the debt security or coupon, an indemnity bond satisfactory to the trustee and us may be required at the expense of the holder

of the debt security before a replacement certificate will be issued.

Information Concerning the Trustee

We will identify in any applicable prospectus supplement relating to any series of debt securities the trustee with respect to the series. The indenture and the Trust Indenture Act contain certain limitations on the rights of the trustee, should it become our creditor, to obtain payment of claims in certain cases, or to realize on certain property received in respect of any the claim, as security or otherwise. The trustee and its affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates; but if the trustee acquires any conflicting interest, as defined in the Trust Indenture Act, it must eliminate the conflict or resign.

The holders of a majority in principal amount of the then outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee. The Trust Indenture Act and the indenture provide that in case an event of default occurs is continuing, the trustee will be required, in the exercise of its rights and powers, to use the degree of care and skill of a prudent man in the conduct of his own affairs. Subject to those provisions, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities, unless they have offered to the trustee indemnity satisfactory to it.

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Global Debt Securities

Unless we indicate otherwise in the applicable prospectus supplement, the following provisions will apply to all debt securities.

The debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with a depositary that we will identify in an applicable prospectus supplement. Each global security will be deposited with the depositary and will bear a legend regarding any related restrictions or other matters as may be provided for pursuant to the applicable indenture.

Unless an applicable prospectus supplement states otherwise, no global security may be transferred to, or registered or exchanged for, debt securities registered in the name of, any person or entity other than the depositary, unless:

- the depositary has notified us that it is unwilling or unable or is no longer qualified to continue as depositary;
- we order the trustee that the global security shall be so transferable, registrable and exchangeable, and the transfers shall be registrable; or
- other circumstances, if any, as may be described in the applicable prospectus supplement.

All debt securities issued in exchange for a global security or any portion of a global security will be registered in those names as the depositary may direct. The specific terms of the depositary arrangement with respect to any portion of a series of debt securities to be represented by a global security will be described in an applicable prospectus supplement.

Debt securities which are to be represented by a global security to be deposited with or on behalf of a depositary will be represented by a global security registered in the name of the depositary or its nominee. Upon the issuance of the global security, and the deposit of the global security with the depositary, the depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of the debt securities represented by the global security to the accounts of institutions that have accounts with the depositary or its nominee, or the Participants. The accounts to be credited will be designated by the underwriters or agents of the debt securities or by us, if the debt securities are offered and sold directly by us.

Ownership of beneficial interests in a global security will be limited to Participants or persons that may hold interests through Participants. Ownership of beneficial interests in a global security will be shown on, and the transfer of that ownership interest will be effected only through, records maintained by the depositary or its nominee for the global security or by Participants or persons that hold through Participants.

The laws of some jurisdictions require that certain purchasers of securities take physical delivery of the securities in certificated form. Those laws may impair the ability to transfer beneficial interests in global securities.

So long as the depositary, or its nominee, is the registered owner of a global security, the depositary or the nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the global security for all purposes under the indenture. Payment of principal of, and premium and interest, if any, on debt securities will be made to the depositary or its nominee as the registered owner or bearer as the case may be of the global security representing the debt securities. Each person owning a beneficial interest in a global security must rely on the procedures of the depositary and, if the person is not a Participant, on the procedures of the Participant through which the person owns its interest, to exercise any rights of a holder under the indenture. If we request any action of holders or if an owner of a beneficial interest in a global security desires to give any notice or take any action a holder is entitled to give or take under the indenture, the depositary will authorize the Participants to give the notice or take the

action, and Participants would authorize beneficial owners owning through the Participants to give the notice or take the action or would otherwise act upon the instructions of beneficial owners owning through them.

The rights of any holder of a debt security to receive payment of principal and premium of, if any, and interest, on or after the respective due dates expressed or provided for in the debt security, or to institute suit for the enforcement of any payment on or after the applicable date, shall not be impaired or affected without the consent of the holders.

Neither we, the trustee, any paying agent nor the security registrar for a debt security will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of the global security for the debt security or for maintaining, supervising or receiving any records relating to the beneficial ownership interests.

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We expect that the depository or its nominee, upon receipt of any payment of principal, premium or interest, will credit immediately Participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of the depository or its nominee. We also expect that payments by Participants to owners of beneficial interests in a global security held through the Participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of the Participants.

If the depository for a global security representing debt securities of a particular series is at any time unwilling or unable to continue as depository and we do not appoint a successor depository within 90 days, we will issue debt securities of the series in definitive form in exchange for the global security. In addition, we may at any time and in our sole discretion determine not to have the debt securities of a particular series represented by one or more global securities and, in that event, will issue debt securities of the series in definitive form in exchange for all of the global securities representing debt securities of the series.

Payment and Paying Agents

Unless we otherwise indicate in any applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in any applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in an applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities will be governed by and construed in accordance with the internal laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

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DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock, preferred stock or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock or debt securities, and the warrants may be attached to or traded separate and apart from these securities. Each series of warrants will be issued under a warrant agreement all as set forth in an applicable prospectus supplement. A copy of the form of warrant agreement, including any form of warrant certificates representing the warrants, reflecting the provisions to be included in the warrant agreements and/or warrant certificates that will be entered into with respect to particular offerings of warrants, will be filed as an exhibit to a Current Report on Form 8-K to be incorporated into the registration statement of which this prospectus constitutes a part prior to the issuance of any warrants.

General

We may issue warrants for the purchase of our common stock, preferred stock or debt securities. We may issue warrants independently or together with any of our securities. Warrants also may be attached to other securities that we may issue. We may issue warrants in different series under separate warrant agreements or under a single warrant agreement between us and a specified warrant agent described in an applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

As of the date of this prospectus, we have warrants to purchase 9,394,862 shares of common stock at a weighted average exercise price of \$4.55 per share issued and outstanding that are not registered under the registration statement of which this prospectus is a part.

An applicable prospectus supplement will describe the specific terms of any warrants that we issue or offer, including:

- the title of the warrants;
- the aggregate number of warrants;
- the price or prices at which the warrants will be issued;
- the currencies in which the price or prices of the warrants may be payable;
- the designation, amount and terms of our capital stock or debt securities purchasable upon exercise of the warrants;
- the designation and terms of our other securities, if any, that may be issued in connection with the warrants, and the number of warrants issued with each corresponding security;
- if applicable, the date that the warrants and the securities purchasable upon exercise of the warrants will be separately transferable;
- the prices and currencies for which the securities purchasable upon exercise of the warrants may be purchased;
- the date that the warrants may first be exercised;
- the date that the warrants expire;
- the minimum or maximum amount of warrants that may be exercised at any one time;

· the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants

· the terms of any rights to redeem or call the warrants

· any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants

· information with respect to book-entry procedures, if any;

· the manner in which the warrant agreements and warrants may be modified;

· a discussion of certain federal income tax considerations; and

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any other material terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Exercise of Warrants

Each warrant will entitle the holder to purchase for cash the principal amount of debt securities, preferred stock or common stock at the applicable exercise price set forth in, or determined as described in, the applicable prospectus supplement. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Warrants may be exercised by delivering to the corporation trust office of the warrant agent or any other officer indicated in the applicable prospectus supplement (a) the warrant certificate properly completed and duly executed and (b) payment of the amount due upon exercise. As soon as practicable following exercise, we will forward the debt securities, preferred stock or common stock purchasable upon exercise. If less than all of the warrants represented by a warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants if the expiration date of the warrants has not occurred. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants. We may, but we will not be required to, permit the exercise of warrants through the delivery of a notice of guaranteed delivery from a bank, a trust company, or a New York Stock Exchange member guaranteeing delivery of (1) payment of the exercise price for the securities for which the warrant is being exercised, and (2) a properly completed and executed warrant certificate. The notice of guaranteed delivery must be received by the warrant agent before the expiration of the warrants, and the warrant agent will not honor a notice of guaranteed delivery unless a properly completed and executed warrant certificate and full payment for the securities being purchased are received by the warrant agent by the close of business on the third business day after the expiration time of the warrants.

Governing Law

Unless we provide otherwise in an applicable prospectus supplement, the warrants and warrant agreements, and any claim, controversy or dispute arising under or related to the warrants or warrant agreements, will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent, if any, will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

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DESCRIPTION OF RIGHTS

We may issue rights to purchase shares of our common stock, preferred stock, or warrants in one or more series. Rights may be issued independently or together with any other offered security and may or may not be transferable by the person purchasing or receiving the subscription rights. In connection with any rights offering to our shareholders, we may enter into a standby underwriting arrangement with one or more underwriters pursuant to which the underwriters will purchase any of the offered securities remaining unsubscribed after the expiration of the rights offering. In connection with a rights offering to our shareholders, we will distribute certificates evidencing the rights and an applicable prospectus supplement to our shareholders on the record date that we set for receiving rights in the rights offering. An applicable prospectus supplement will describe the following terms of rights in respect of which this prospectus is being delivered:

- the title of the rights;
- the securities for which the rights are exercisable;
- the exercise price for the rights;
- the date of determining the security holders entitled to the rights distribution;
- the number of the rights issued to each security holder;
- the extent to which the rights are transferable;
- if applicable, a discussion of the material United States federal income tax considerations applicable to the issuance or exercise of the rights;
- the date on which the right to exercise the rights shall commence, and the date on which the rights shall expire (subject to any extension);
- the conditions to completion of the rights offering;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the rights;
- the extent to which the rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the material terms of any standby underwriting or other purchase arrangement that we may enter into in connection with the rights offering; and
- any other terms of the rights, including terms, procedures and limitations relating to the exchange and exercise of the rights.

Each right will entitle the holder to purchase for cash the amount of securities, at the exercise price. Rights may be exercised at any time up to the close of business on the expiration date of the rights. After the close of business on the expiration date, all unexercised rights will become void. The manner in which rights may be exercised will be described in an applicable prospectus supplement. We may, but we will not be required to, permit the exercise of rights through the delivery of a notice of guaranteed delivery from a bank, a trust company, or a New York Stock Exchange member guaranteeing delivery of (1) payment of the exercise price for the securities for which the rights are being exercised, and (2) a properly completed and executed rights certificate. The notice of guaranteed delivery must

be received by the rights agent before the expiration of the rights, and the rights agent will not honor a notice of guaranteed delivery unless a properly completed and executed rights certificate and full payment for the securities being purchased are received by the rights agent by the close of business on the third business day after the expiration time of the rights. Upon receipt of payment and the proper completion and due execution of the rights certificate at the designated office of the rights agent or any other office indicated in an applicable prospectus supplement, we or the transfer agent will forward, as soon as practicable, the securities purchased through upon the exercise of the rights. We may determine to offer any unsubscribed offered securities directly to persons other than shareholders, to or through agents, underwriters or dealers or through a combination of the methods, including pursuant to standby underwriting arrangements, as set forth in an applicable prospectus supplement.

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DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in an applicable prospectus supplement. The terms of any units offered under an applicable prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more debt securities, common stock, preferred stock, warrants and/or units in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in an applicable prospectus supplement the terms of the series of units, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock,” “Description of Debt Securities,” “Description of Warrants,” and “Description of Rights” will apply to each unit and to any common stock, preferred stock, debt security, warrant or right included in each unit, respectively.

Issuance in Series

We may issue units in the amounts and in numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the

applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Title

We, the unit agent and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purposes and as the person entitled to exercise the rights attaching to the units, despite any notice to the contrary.

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PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
 - at prices related to such prevailing market prices; or
- at negotiated prices.

We may issue securities to other companies or their security holders to acquire those companies or equity interests in those companies, or to acquire assets of those companies, through mergers or consolidations with us or any of our subsidiaries, or through the exchange of our securities for securities of the other companies, or through the exchange of assets of other companies for our securities, or through similar transactions. We may also issue securities to third parties to acquire patents or other intellectual property or licenses or similar rights to use patents or other intellectual property.

We may also issue our securities to one or more of our subsidiaries, including subsidiaries that we presently control and subsidiaries that we may organize or acquire in the future, and those subsidiaries may resell our securities to raise capital or to acquire other companies or equity interests in other companies, or to acquire assets of other companies. Our subsidiaries that acquire our securities may also transfer some or all of those securities to third parties to acquire patents or other intellectual property or licenses or similar rights to use patents or other intellectual property.

Our officers and directors, members of their immediate families, and their respective affiliates may purchase securities that we offer, subject to compliance with our Related Person Transaction Policy, including approval of our Audit Committee, in the case of any transaction in excess of \$120,000, policies established by our Board of Directors with regard to trading in our securities by officers and directors, and applicable rules of the NYSE MKT.

In addition, we may issue the securities being offered by this prospectus as a dividend or distribution.

An applicable prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters, if any;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Sales Through Underwriters or Dealers

If we use an underwriter or underwriters in the sale of securities offered by this prospectus, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us, unless the underwriters are acting only as our agents for the purpose of selling our securities as

described below under “Sales Through Agents.” The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales made by the underwriters in connection with the distribution of our securities by the underwriters. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in an applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers.

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If we use an underwriter or underwriters in the sale of securities, we will execute an underwriting agreement with the underwriter or underwriters at the time we reach an agreement for sale. We will set forth in an applicable prospectus supplement the names of the specific managing underwriter or underwriters, as well as any other underwriters, and the terms of the transactions, including compensation of the underwriters and dealers. This compensation may be in the form of discounts, concessions or commissions. Only underwriters named in an applicable prospectus supplement will be underwriters of the securities offered by such prospectus supplement.

In compliance with guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the consideration or discount to be received by any FINRA member or independent broker dealer may not exceed eight percent of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions. If we grant any over-allotment option, the terms of any over-allotment option will be set forth in an applicable prospectus supplement relating to those securities.

Sales Through Dealers

If we use dealers in the sale of the securities offered by this prospectus, we or an underwriter will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices to be determined by the dealers at the time of resale. An applicable prospectus supplement will set forth the names of the dealers and the terms of the transactions.

Direct Sales

We may directly solicit offers to purchase the securities offered by this prospectus. In this case, no underwriters or agents would be involved. We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of the sales will be described in an applicable prospectus supplement.

Sales Through Agents

Securities also may be offered and sold through agents designated from time to time. An applicable prospectus supplement will name any agent involved in the offer or sale of the securities and will describe any commissions payable to the agent. Unless otherwise indicated in an applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment. Any agent may be deemed to be an underwriter within the meaning of the Securities Act with respect to any sale of those securities.

Delayed Delivery Contracts

If the applicable prospectus supplement indicates, we may authorize agents, underwriters or dealers to solicit offers from institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. Institutions with which contracts of this type may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions, but in all cases those institutions must be approved by us. The obligations of any purchaser under any contract of this type will be subject to the condition that the purchase of the securities shall not at the time of delivery be prohibited under the laws of the jurisdiction to which the purchaser is subject. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Market Making, Stabilization and Other Transactions

Our common stock is listed on the NYSE MKT. Any shares of common stock sold pursuant to an applicable prospectus supplement will be eligible for listing and trading on the NYSE MKT, subject to official notice of issuance. Unless the applicable prospectus supplement states otherwise, each other class or series of securities issued will be a new issue and will have no established trading market. We may elect to list any other class or series of securities on an exchange, but we are not currently obligated to do so. Any underwriters that we use in the sale of offered securities may make a market in the securities, but may discontinue market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

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Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Any such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sales for hedging purposes and any other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others.

The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities arising from the distribution of our securities by the underwriters.

Electronic Auctions

We also may make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of the securities, you will want to pay particular attention to the description of that system we will provide in an applicable prospectus supplement.

The electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which the securities are sold. These bidding or ordering systems may present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. Of course, many pricing methods can and may also be used.

Upon completion of the electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders

would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against specified liabilities, including liabilities under the Securities Act, or to contribution by us to payments they may be required to make in respect to those liabilities. The applicable prospectus supplement will describe the terms and conditions of indemnification or contribution. Some of our agents, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business. We will describe in an applicable prospectus supplement the nature of any such relationship and the name of the parties involved. Any lockup arrangements will be set forth in the applicable prospectus supplement.

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LEGAL MATTERS

The validity of the securities offered by this prospectus and any applicable prospectus supplement thereto will be passed upon for us by K&L Gates LLP, Irvine, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we name in the applicable prospectus supplement.

EXPERTS

OUM & Co. LLP, our independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016, and the effectiveness of our internal control over financial reporting as of December 31, 2016, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance on OUM & Co. LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus and any accompanying prospectus supplement do not contain all of the information set forth in the registration statement and its exhibits and schedules in accordance with SEC rules and regulations. For further information with respect to us and the securities being offered hereby, you should read the registration statement, including its exhibits and schedules. Statements contained in this prospectus and any accompanying prospectus supplement, including documents that we have incorporated by reference, as to the contents of any contract or other document referred to are not necessarily complete, and, with respect to any contract or other document filed as an exhibit to the registration statement or any other such document, each such statement is qualified in all respects by reference to the corresponding exhibit. You should review the complete document to evaluate these statements. You may obtain copies of the registration statement and its exhibits via the SEC's EDGAR database or our website, or at the offices of the SEC, where they may be examined without charge at the Public Reference Room, at the address listed below, or obtained upon payment of the prescribed fees.

We file annual, quarterly and current reports, proxy statements and other documents with the SEC under the Exchange Act. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers, including our company, that file electronically with the SEC. You may obtain documents that we file with the SEC at <http://www.sec.gov> and read and copy them at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 (information on operation of the Public Reference Room is available by calling the SEC at 1-800-SEC-0330).

We also make these documents available on our website at www.biotimeinc.com. Our website and the information contained or connected to our website is not incorporated by reference in this prospectus or any accompanying prospectus supplement, and you should not consider it part of this prospectus or any accompanying prospectus supplement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus certain of the information we file with the SEC. This means we can disclose important information to you by referring you to another document that has been filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 16, 2017, as amended by our Annual Report on Form 10-K/A, filed with the SEC on March 29, 2017, including the portions of our Definitive Proxy Statement on Schedule 14A filed with the SEC on May 1, 2017, incorporated by reference therein;

our Current Reports on Form 8-K filed with the SEC on February 9, 2017, February 13, 2017, February 15, 2017, February 21, 2017, March 16, 2017, March 28, 2017, April 4, 2017, and April 11, 2017; and

the description of our common stock contained in our Registration Statement on Form 8-A (File No. 001-12830) filed with SEC on October 26, 2009, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering of the securities described in this prospectus, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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We will provide to each person, including any beneficial holder, to whom a prospectus is delivered, at no cost, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus. You should direct any requests for documents to: BioTime, Inc., 1010 Atlantic Avenue, Suite 102, Alameda, California 94501; telephone number: (510) 521-3390. You may also access the documents incorporated by reference in this prospectus through our website at www.biotimeinc.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

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Shares of Common Stock

PROSPECTUS SUPPLEMENT

Sole Book-Running Manager

RAYMOND JAMES

October , 2017

