BioTime and Asterias Biotherapeutics Enter Into Definitive Merger Agreement to Create Leading Cell Therapy Company

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BioTime Acquires Two Clinical-Stage Cell Therapy Product Candidates Addressing Significant Unmet Needs in Spinal Cord Injury and Immuno-Oncology

Asterias Stockholders to Receive 0.71 Shares of BioTime for Each Share of Asterias Biotherapeutics

ALAMEDA, Calif. & FREMONT, Calif.--(BUSINESS WIRE)--Nov. 8, 2018-- BioTime, Inc. (NYSE American and TASE: BTX), and Asterias Biotherapeutics, Inc. ("Asterias") (NYSE American: AST), today announced that they have entered into a definitive merger agreement whereby BioTime will acquire all of the remaining outstanding common stock of Asterias that are not currently owned by BioTime. Asterias stockholders will receive 0.71 shares of BioTime common shares for every share of Asterias common stock and will own approximately 16.2% of the combined company. Subject to customary closing conditions, including approval by the respective shareholders of BioTime and Asterias, the transaction is expected to be completed in the first quarter of 2019.

"Our vision is to build BioTime into a premier cell therapy company and this acquisition can support that transformation as it not only diversifies our pipeline with two additional clinical-stage assets addressing high unmet medical needs, but also adds partnerships with notable institutions such as the California Institute for Regenerative Medicine and Cancer Research UK," stated Brian M. Culley, Chief Executive Officer of BioTime. "We believe this merger is an exciting opportunity for BioTime's shareholders to benefit from the potential future value of a more differentiated pipeline as well as the opportunity to impact disease areas that are in desperate need of innovative therapeutic approaches."

"This transaction can create substantial value for our stockholders, employees and our clinical programs," stated Michael Mulroy, Chief Executive Officer of Asterias. "The stock merger structure provides Asterias stockholders the ability to continue their investment in our clinical programs in spinal cord injury and non-small cell lung cancer as part of a larger, more diversified company with greater resources."

Asterias' Pipeline

OPC1 – Innovative Phase 2 Program for the Treatment of Severe Spinal Cord Injury

- OPC1 is a cellular therapy utilizing oligodendrocyte progenitor cells (OPCs), which in preclinical testing has demonstrated potentially reparative functions that address the complex pathologies observed in demyelination disorders such as spinal cord injury and multiple neurodegenerative diseases, including multiple sclerosis and white matter stroke. The potential reparative functions of OPC1 include the production of neurotrophic factors, the stimulation of vascularization, and the induction of remyelination of denuded axons, all of which are critical for survival, regrowth, and conduction of nerve impulses through axons at the injury site.
- Asterias is currently completing a Phase 1/2a clinical trial (the "SCiStar Study") for severe spinal cord injury where there currently are no approved therapies. The results from the SCiStar Study have been promising:
    - **Safety Profile**: Results-to-date for the SCiStar Study have shown no evidence of adverse changes in any of the subjects treated with OPC1. To date, there have been no serious adverse events (SAEs) related to the OPC1 cells.
    - **Cell Engraftment**: Over 95% of subjects in the SCiStar Study have magnetic resonance imaging (MRI) scans consistent with the formation of a tissue matrix at the injury site, which is encouraging evidence that OPC1 cells have engrafted at the injury site and helped to prevent cavitation.
    - **Motor Function Recovery**: Many of the patients in the SCiStar Study have shown promising upper extremity motor recovery in their arms, hands, and fingers.
- An independent data review meeting was held recently to discuss the latest results from the SCiStar Study and positive feedback was received from the outside medical and scientific experts on the panel.
- A meeting with the FDA under OPC1's RMAT designation is scheduled for later this year to discuss the trial design of the next OPC1 study.
- A final update on the SCiStar Study results is expected in the first quarter of 2019.
- The SCiStar Study has been partially funded by a $14.3 million grant from the California Institute for Regenerative Medicine (CIRM) and there is the potential to obtain additional non-dilutive funding in 2019 to partially offset the cost of OPC1's next phase of clinical development.

VAC2 – Phase 1 Program for the Treatment of Non-Small Cell Lung Cancer (NSCLC) Partnered with Cancer Research UK

- VAC2 is a non-patient-specific, or "allogeneic," cancer immunotherapy candidate. VAC2 cells are engineered to express a protein widely expressed in tumor cells but rarely found in normal cells. The VAC2 antigen presenting dendritic cells instruct the immune system to generate responses against tumor cells.
- VAC2 currently is being investigated in a Phase 1 study for the treatment of NSCLC and is sponsored and conducted by

Cancer Research UK.
    - The safety data from the first three subjects has been reviewed by the study's Safety Review Committee which found VAC2 to be safe and well-tolerated in those subjects.
    - The study currently is enrolling subjects in the advanced disease cohort of the study and immune response and survival data are expected during 2019 and 2020. The study design also includes a cohort of less advanced patients where tumors have been resected.
- VAC2 is potentially complementary and synergistic with other immune therapies such as immune checkpoint inhibitors.
- In addition to being investigated in NSCLC, a leading cause of cancer deaths, VAC2 is a platform technology that has the potential to be applied to other solid and liquid tumors and to deliver additional or different antigens depending on the cancer type.

About the Proposed Merger

Under the terms of the merger agreement, Asterias stockholders will receive 0.71 common share of BioTime for each share of common stock of Asterias they own upon closing of the merger. The merger agreement, the merger and the other transactions contemplated in the merger agreement have been approved by the board of directors of Asterias (by unanimous vote of the disinterested members of the Asterias board of directors, acting upon the recommendation of a special committee comprised of only independent and disinterested members of the board of directors of Asterias). The merger agreement, the merger, the issuance of the BioTime shares in the merger and the other transactions contemplated in the merger agreement have been approved by the board of directors of BioTime (by unanimous vote of the disinterested members of the BioTime board of directors acting upon the unanimous recommendation of a special committee comprised of only disinterested and independent directors of BioTime). The merger is expected to close during the first quarter of 2019, subject to approval of the merger by the BioTime and Asterias stockholders, and other customary closing conditions.

The combined company will be led by Brian M. Culley, President and Chief Executive Officer of BioTime. It is expected that, following closing of the transaction, BioTime's Board of Directors will consist of nine members, with Don Bailey, Chairman of Asterias' Board of Directors, joining the BioTime Board of Directors and Mr. Mulroy, Asterias' Chief Executive Officer, remaining on the BioTime Board.

Pursuant to the terms of a "go-shop" provision in the merger agreement, between the date of the merger agreement and December 3, 2018, Asterias and its representatives may solicit, discuss or negotiate alternative proposals from third parties for the acquisition of Asterias. Following the expiration of this go-shop period, Asterias will become subject to customary "no shop" restrictions on its and its representatives' ability to solicit, discuss or negotiate alternative acquisition proposals from third parties, subject to exceptions for acquisition proposals that the Asterias board of directors and the Asterias special committee has determined constitutes or is reasonably expected to constitute a Superior Proposal (as defined in the merger agreement), and further subject to compliance with certain conditions.

BioTime's financial advisor in the transaction is Maxim Group LLC. Raymond James is acting as financial advisor to Asterias. Cooley LLP is serving as legal counsel to BioTime and Dentons LLP is serving as legal counsel to Asterias.

About BioTime, Inc.

BioTime is a clinical-stage biotechnology company focused on the development and commercialization of novel therapies for the treatment of degenerative diseases. BioTime's pipeline is based on two platform technologies which encompass cell replacement and cell/drug delivery. BioTime's lead cell replacement product candidate is OpRegen®, a retinal pigment epithelium transplant therapy in Phase 2 development for the treatment of dry age-related macular degeneration, the leading cause of blindness in the developed world. BioTime's lead cell delivery clinical program is Renevia ®, an investigational medical device being developed as an alternative for whole adipose tissue transfer procedures. BioTime also has significant equity holdings in two publicly traded companies, Asterias Biotherapeutics, Inc. (NYSE American: AST) and OncoCyte Corporation (NYSE American: OCX), and a private company, AgeX Therapeutics, Inc.

BioTime common stock is traded on the NYSE American and TASE under the symbol BTX. For more information, please visit www.biotime.com or connect with the company on Twitter, LinkedIn, Facebook, YouTube, and Google+. To receive ongoing BioTime corporate communications, please click on the following link to join the Company's email alert list: http://news.biotime.com.

About Asterias Biotherapeutics, Inc.

Asterias Biotherapeutics, Inc. is a biotechnology company dedicated to developing cell-based therapeutics to treat neurological conditions associated with demyelination and cellular immunotherapies to treat cancer. Asterias is presently focused on advancing two clinical-stage programs which have the potential to address areas of high unmet medical need in the fields of neurology and oncology. OPC1 (oligodendrocyte progenitor cells) is currently in a Phase 1/2a dose escalation clinical trial in spinal cord injury. VAC2 (antigen-presenting allogeneic dendritic cells) is an allogeneic cancer immunotherapy. The Company's research partner, Cancer Research UK, has commenced a first-in-human clinical trial of VAC2 in non-small cell lung cancer. Additional information about Asterias can be found at www.asteriasbiotherapeutics.com.

Additional Information and Where to Find It

This communication is being made in respect of the proposed business combination involving BioTime, Inc. and Asterias Biotherapeutics, Inc. In connection with the proposed transaction, BioTime and Asterias plan to file documents with the U.S. Securities and Exchange Commission (the "SEC"), including the filing by BioTime of a Registration Statement on Form S-4 containing a Joint Proxy Statement/Prospectus and each of BioTime and Asterias plan to file with the SEC other documents regarding the proposed transaction. INVESTORS AND SECURITY HOLDERS OF BIOTIME AND ASTERIAS ARE URGED TO CAREFULLY READ THE JOINT PROXY STATEMENT/PROSPECTUS (WHEN AVAILABLE) AND OTHER DOCUMENTS FILED WITH THE SEC BY BIOTIME AND ASTERIAS BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION. Investors and security holders may obtain free copies of these documents (when they are available) and other documents filed with the SEC at the SEC's web site at www.sec.gov and by contacting BioTime Investor Relations at (510) 871-4188 or Asterias Investor Relations at (510) 456-3892. Investors and security holders may obtain free copies of the documents filed with the SEC on BioTime's website at www.biotimeinc.com or Asterias' website at www.asteriasbiotherapeutics.com or the SEC's website at www.sec.gov.

BioTime, Asterias and their respective directors and executive officers may be deemed participants in the solicitation of proxies with respect to the proposed transaction. Information regarding the interests of these directors and executive officers in the proposed transaction will be included in the Joint Proxy Statement/Prospectus described above. Additional information regarding the directors and executive officers of BioTime is also included in BioTime's proxy statement for its 2018 Annual Meeting of Shareholders, which was filed with the SEC on March 29, 2018, and additional information regarding the directors and executive officers of Asterias is also included in Asterias' proxy statement for its 2018 Annual Meeting of Stockholders, which was filed with the SEC on April 30, 2018, respectively.

No Offer or Solicitation

This document does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Forward-Looking Statements

Certain statements in this communication, including statements relating to the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement and the combined company's future financial condition performance and operating results, strategy and plans, including the design, status, funding and timing of the clinical trials and further development and potential of the product candidates are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 giving BioTime's and Asterias' expectations or predictions of future financial or business performance or conditions. These forward-looking statements are subject to numerous assumptions, risks and uncertainties which change over time. Forward-looking statements speak only as of the date they are made and we assume no duty to update forward-looking statements. In addition to factors previously disclosed in BioTime's and Asterias' reports filed with the SEC and those identified elsewhere in this communication, the following factors, among others, could cause actual results to differ materially from forward-looking statements and historical performance: the ability to meet closing conditions to the Merger, including requisite approval by BioTime's and Asterias' stockholders, on a timely basis or at all; delay in closing the Merger; the ultimate outcome and results of integrating the operations of BioTime and Asterias and the ultimate ability to realize synergies and other benefits; business disruption following the Merger; the availability and access, in general, of funds to fund operations and necessary capital expenditures. More information on potential factors that could affect our results is included from time to time in the SEC filings and reports of BioTime and Asterias, including the risks identified under the sections captioned "Risk Factors" in BioTime's quarterly report on Form 10-Q filed with the SEC on November 8 and Asterias' annual report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 15, 2018, and Asterias' quarterly report on Form 10-Q for the quarter ended September 30, 2018, which Asterias expects to file on November 9, 2018.

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