

BioTime Presents Updated OpRegen® Clinical Trial Data at ARVO

May 1, 2018

- Signs of structural improvement in the retina
- Signs of a reduction and change in drusen material
- Signs of engraftment and cell survival have been maintained for over 2 years in some patients

ALAMEDA, Calif.--(BUSINESS WIRE)--May 1, 2018-- BioTime, Inc. (NYSE American: BTX), a clinical-stage biotechnology company focused on degenerative diseases, today announced that an abstract related to one of its lead programs, OpRegen® for dry-AMD, was presented at the Association for Research in Vision and Ophthalmology (ARVO) meeting taking place from April 29th – May 3rd, 2018, in Honolulu, Hawaii.

Dr. Eyal Banin (Hadassah-Hebrew University Medical Center, Jerusalem, Israel), the presenting author and one of the investigators participating in the study, presented data from the ongoing open-label, dose escalation study. The abstract presented was titled, "Phase I/IIa Clinical Trial of Human Embryonic Stem Cell (hESC)-Derived Retinal Pigmented Epithelium (RPE, OpRegen®)."

Data shown at ARVO from the phase I/IIa open-label study showed that both the surgical procedure and the OpRegen® cells were generally well tolerated. The data presented shows there were no treatment-related systemic serious adverse events reported to date in the first nine patients. The Best Corrected Visual Acuity (BCVA) of these patients have remained relatively stable thus far.

In addition, the imaging of patients 8 and 9 suggests structural improvement within the retina.

- Within the area of the OpRegen® cell transplant, there are signs of a reduction and change in drusen material.
- An improvement or possible restoration in the Retinal Pigment Epithelium, or RPE, layer.
- The photoreceptor layer and ellipsoid zone assume a more regular appearance in areas of the transition zone where OpRegen® was administered, suggesting some potential structural restoration of the retina.

This is of particular importance because in dry-Age Related Macular Degeneration (dry-AMD), the structure of the retina can be impacted by the formation of excess drusens. The formation of excess drusens can impact the layers of RPE cells and photoreceptors, which are critical to sight.

Several of our investigators and therapeutic area experts have suggested that there is a marked improvement in the scoring of this non-atrophic area of intermediate dry-AMD. BioTime is further encouraged that the OpRegen® cells remain present long after transplant and there are no obvious signs or symptoms of immune reaction or rejection.

"We are encouraged by the results presented at ARVO and look forward to reporting data from ongoing follow up and the next (fourth) cohort," commented Dr. Gary S. Hogge, Senior Vice President, Clinical and Medical Affairs of BioTime. "In the fourth cohort, we are enrolling patients with better vision who are likely in earlier stages of the disease, where we plan to study, along with safety a greater number of functional measures."

To view the actual presentation, please refer to the events and presentation section of the BioTime website at www.biotime.com.

About OpRegen®

OpRegen®, which is being studied for the treatment of the dry form of AMD, consists of a suspension of retinal pigment epithelial (RPE) cells that are delivered subretinally during a simple intraocular injection. RPE cells are essential components of the back lining of the retina, and function to help nourish the retina including photoreceptors. A proprietary process that drives the differentiation of human pluripotent stem cells is used to generate high purity OpRegen® RPE cells. OpRegen® RPE cells are also "xeno-free," meaning that no animal products are used at any point in the derivation and production process. The avoidance of the use of animal products eliminates some potential safety concerns. Preclinical studies in rats have shown that following a single subretinal injection of OpRegen®, the cells can rapidly organize into its natural monolayer structure in the subretinal space and survive throughout the lifetime of the animal. OpRegen® is designed to be an "off-the-shelf" allogeneic (non-patient specific) product. Unlike treatments that require multiple, frequent injections into the eye, it is expected that OpRegen® will be administered in a single procedure.

OpRegen® was granted Fast Track designation from the FDA, which allows more frequent interactions with the agency, and eligibility for accelerated approval and priority review. OpRegen® is a registered trademark of Cell Cure Neurosciences Ltd., a majority-owned subsidiary of BioTime, Inc.

About BioTime, Inc.

BioTime is a clinical-stage biotechnology company focused on degenerative diseases. Its clinical programs are based on two platform technologies: cell replacement and cell/drug delivery. With its cell replacement platform, BioTime is creating new cells and tissues with its proprietary pluripotent cell technologies. These cells and tissues are developed to replace those that are either rendered dysfunctional or lost due to degenerative diseases. BioTime's cell/drug delivery programs are based upon its proprietary HyStem® cell and drug delivery matrix technology. HyStem® was designed to provide for the transfer, retention, engraftment and metabolic support of cellular replacement therapies. BioTime's lead cell delivery clinical program is Renevia®, which consists of HyStem® combined with the patient's own adipose (fat) progenitor cells. Renevia® met its primary endpoint in an EU pivotal clinical trial for the treatment of facial lipoatrophy in HIV patients in 2017. BioTime has submitted Renevia® for CE Mark approval in the EU. There were no device related serious adverse events reported to date. BioTime's lead cell replacement product candidate is OpRegen®, a retinal

pigment epithelium transplant therapy, which is in a Phase I/IIa multicenter clinical trial for the treatment of dry age-related macular degeneration, the leading cause of blindness in developing countries. There were no related serious adverse events reported to date in the first nine patients. 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: [BioTime News Alerts](#).

View source version on businesswire.com: <https://www.businesswire.com/news/home/20180501005675/en/>

Source: BioTime, Inc.

BioTime
David Nakasone, 510-871-4188
DNakasone@biotime.com