Pluristem Enters into Collaboration with NASA to Study PLX Therapeutic Benefits in Space Missions

Awarded NASA’s 2019 Ames Research Innovation Award

HAIFA, Israel, February 20, 2019 - Pluristem Therapeutics Inc. (Nasdaq:PSTI) (TASE:PSTI), a leading regenerative medicine company developing novel placenta-based cell therapy products, today announced a collaboration between the company and NASA’s Ames Research Center to evaluate the potential of Pluristem’s PLX cell therapies in preventing and treating medical conditions caused during space missions. Dr. Ruth Globus of NASA’s Ames Research Center, in California’s Silicon Valley, has been awarded a 2019 NASA Ames Research Innovation Award (ARIA) for the collaboration with Pluristem.

The project, titled, “Therapeutic Stromal Cells for Health in Space,” has been selected to pre-clinically evaluate the potential of Pluristem’s PLX cell therapies in preventing and treating medical conditions caused during space missions, including indications relating to blood, bone, muscle, brain and heart.

“During space missions astronauts are exposed to a challenging environment which includes radiation and microgravity, leading to muscle and bone loss as well as other potentially serious medical conditions,” said Dr. Globus of NASA’s Ames Research Center. “In fact, unless astronauts allocate about two hours of time for daily exercise sessions, they can experience a rapid and dramatic muscle loss. Astronauts can experience up to 20% muscle loss in muscle mass on spaceflights lasting just five to eleven days and in longer missions, they also lose bone density at a rate of 1-2% per month which can lead to more fragile bones. Therefore, we are intrigued by the possibility that PLX cell therapies can address these and other persistent negative effects of space travel on the human body.”

“We are excited to partner with NASA on this project, which we believe further demonstrates the potential broad clinical utility of our PLX cell therapies,” said Yaky Yanay, President and Co-Chief Executive Officer of Pluristem. “Three of the biggest medical problems astronauts face during long term space exploration missions are muscle and bone loss and radiation exposure. As demonstrated in our previous studies, PLX cells have the potential ability to help regenerate muscles, as well as protect and regenerate the hematological system following exposure to
radiation. We look forward to harnessing our PLX regenerative medicine platform for space research, and establishing a robust and mutually beneficial partnership with NASA.”

The ARIA award invests in highly innovative, exploratory scientific research that directly supports advancing the strategic direction of NASA’s Ames Research Center and NASA. It also promotes the vitality of NASA’s Ames Research Center through strategic investments in scientific research, capabilities and people.

About Pluristem Therapeutics

Pluristem Therapeutics Inc. is a leading regenerative medicine company developing novel placenta-based cell therapy product candidates. The Company has reported robust clinical trial data in multiple indications for its patented PLX cell product candidates and is currently conducting late stage clinical trials in several indications. PLX cell product candidates are believed to release a range of therapeutic proteins in response to inflammation, ischemia, muscle trauma, hematological disorders and radiation damage. The cells are grown using the Company's proprietary three-dimensional expansion technology and can be administered to patients off-the-shelf, without tissue matching. Pluristem has a strong intellectual property position; a Company-owned and operated GMP-certified manufacturing and research facility; strategic relationships with major research institutions; and a seasoned management team.

Safe Harbor Statement

This press release contains express or implied forward-looking statements within the Private Securities Litigation Reform Act of 1995 and other U.S. Federal securities laws. For example, Pluristem is using forward-looking statements when it discusses the potential benefits from its project relating to the evaluation of PLX cell therapies in treating medical conditions caused during space missions and its belief that the collaboration with NASA further demonstrates the potential broad clinical utility of PLX cell therapies. These forward-looking statements and their implications are based on the current expectations of the management of Pluristem only, and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements: changes in technology and market requirements; Pluristem may encounter delays or obstacles in launching and/or successfully completing its clinical trials; Pluristem’s products may not be approved by regulatory agencies, Pluristem’s technology may not be validated as it progresses further and its methods may not be accepted by the scientific community; Pluristem may be unable to retain or attract key employees whose knowledge is essential to the development of its products; unforeseen scientific difficulties may develop with Pluristem’s process; Pluristem’s products may wind up being more expensive than it anticipates; results in the laboratory may not translate to equally good results in real clinical
settings; results of preclinical studies may not correlate with the results of human clinical trials; Pluristem’s patents may not be sufficient; Pluristem’s products may harm recipients; changes in legislation may adversely impact Pluristem; inability to timely develop and introduce new technologies, products and applications; loss of market share and pressure on pricing resulting from competition, which could cause the actual results or performance of Pluristem to differ materially from those contemplated in such forward-looking statements. Except as otherwise required by law, Pluristem undertakes no obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. For a more detailed description of the risks and uncertainties affecting Pluristem, reference is made to Pluristem's reports filed from time to time with the Securities and Exchange Commission.

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