

Pluristem and Charité University of Medicine Berlin Join Forces Targeting Potential Treatment for Respiratory and Inflammatory Intratissue Complications Caused by COVID-19

HAIFA, Israel, March 12, 2020 - Pluristem Therapeutics Inc. (Nasdaq:PSTI) (TASE:PSTI), a leading regenerative medicine company developing a platform of novel biological products, today announced it has signed a collaborative agreement with the BIH Center for Regenerative Therapy (BCRT) and the Berlin Center for Advanced Therapies (BeCAT) at Charite' University of Medicine Berlin to expand its existing framework and research agreement and conduct a joint project evaluating the therapeutic effects of Pluristem's patented PLX cell product candidates for potential treatment of the respiratory and inflammatory complications associated with the COVID-19 coronavirus.

PLX cells are allogeneic mesenchymal-like cells that have immunomodulatory properties that induce the immune system's natural regulatory T cells and M2 macrophages, and thus may prevent or reverse the dangerous overactivation of the immune system. Accordingly, PLX cells may potentially reduce the fatal symptoms of COVID-19 induced pneumonia and pneumonitis. Previous pre-clinical findings of PLX cells revealed significant therapeutic effects in animal studies of pulmonary hypertension, lung fibrosis, acute kidney injury and gastrointestinal injury which are potential complications of the severe COVID-19 infection. Clinical data using PLX cells demonstrated the strong immunomodulatory potency of PLX cells in patients post major surgery. Taken together, PLX cells' potential capabilities with the safety profile observed from clinical trials involving hundreds of patients worldwide potentially position them as a therapy for mitigating the tissue-damaging effects of COVID-19.

"The collaboration with Charité researchers will allow us to expedite our program to potentially enable the use of PLX cells to treat patients infected with COVID-19 that have respiratory and immunological complications. The fact that PLX is available off-the-shelf, combined with our ability to manufacture large scale quantities, is a key advantage in case a large number of patients may need respiratory support. The primary target is to prevent the deterioration of patients towards Acute Respiratory Distress Syndrome (ARDS) and sepsis. We intend to start the joint collaboration immediately, with an aim to bringing much needed treatment to a rapidly expanding global health threat," stated Yaky Yanay, Pluristem President and CEO.

Prof. Hans-Dieter Volk, Director of the BCRT at Charite' University Medicine Berlin, commented, "Through our long-term collaboration with Pluristem, we have a thorough understanding of PLX cells and their mechanism of action. Charite's' unique knowledge, which includes research and

clinical expertise in the immunopathogenesis of viral infections and critically ill patients, provides us an accelerated framework in which we believe PLX cells can be explored as a potential therapy for patients infected with COVID-19."

About BIH Center for Regenerative Therapies

The BIH Center for Regenerative Therapies (BCRT) is a cooperative translational research institution of the Charité University Hospital in Berlin and the Berlin Institute of Health (BIH). The mission of the BCRT is to develop a translational platform for Regenerative Therapies from bench-to-bedside. The clinical platforms -- Immune, muskuloskleletal, and cardiovascular system -- are cross-linked by cross-field clinical fields (cachexia/sarcopenia, genetic diseases) and technology and translation support platforms. There are extended experiences in clinical trials with cell therapy, including phase 1-3 trials with PLX cells.

About Berlin Center for Advanced Therapies (BeCAT)

The Berlin Center for Advanced Therapies is a spin-off of the BCRT focusing on translation of cell and gene therapies in the major research fields of regenerative medicine and cancer. It consists of four research fields (endogenous regeneration, tissue engineering, anti-cancer immunotherapy, and rare diseases) and three technology platforms (manufacturing, product characteristics and biomarker, and clinical development and regulatory affairs.

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 expanding its collaborative agreement with the BCRT to conduct a joint project evaluating the therapeutic effects of Pluristem's patented PLX cells product candidates for potential treatment of the respiratory and inflammatory complications associated with COVID-19, and the timing thereof, the potential of PLX cells in preventing or reversing the dangerous overactivation of the immune system, that PLX cells may potentially reduce the fatal symptoms of COVID-19 induced pneumonia and pneumonitis, and PLX cells' position as a therapy for mitigating the tissue-damaging effects of

COVID-19. 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.

Contact:

Dana Rubin
Director of Investor Relations
972-74-7107194
danar@pluristem.com