Pluristem Expands its Reach in the Treatment of Impaired Hematopoietic Systems with a European Patent Covering PLX-R18 in Chemotherapy, ARS, Genetic Disorders and Autoimmune Diseases

Patent significantly expands potential indications for PLX-R18 and grants Pluristem broad coverage in the treatment of damaged hematopoietic systems

HAIFA, ISRAEL, October 23, 2017-- Pluristem Therapeutics Inc. (NASDAQ: PSTI, TASE: PSTI), a leading developer of placenta-based cell therapy products, announced today that the European Patent Office has issued the company a patent titled, “Methods for Treating Radiation or Chemical Injury” for its PLX-R18 cell therapy.

Pluristem currently holds several patents worldwide to cover placental 3D-expanded cells in the treatment of impaired hematopoietic systems when a bone marrow, cord blood, or peripheral blood transplant takes place. This important patent expands Pluristem’s IP assets to include a new set of indications related to the bone marrow’s inability to produce blood cells, such as acute radiation syndrome (ARS), autoimmune diseases such as aplastic anemia, genetic disorders, chemotherapy, radiation therapy, and side effects from other treatments. Pluristem currently holds over 115 issued patents and 100 pending patent applications worldwide.

“PLX-R18 is covered by several patents in key markets for the treatment of bone marrow failure following a transplant of hematopoietic stem cells, or for the support of such a transplant. What makes this a key patent for our IP assets is that it addresses the treatment of a much broader range of medical conditions in which bone marrow is damaged and the patient has not received a transplant,” stated Yaky Yanay, Co-CEO and President of Pluristem. “PLX-R18 cells have shown the ability to trigger regeneration of the hematopoietic system, thereby supporting the recovery and production of white blood cells, red blood cells and platelets. With its capabilities, we believe that PLX-R18 has the potential to treat a broad range of hematologic indications, which together constitute a substantial global market.”

About PLX-R18

PLX-R18 is Pluristem’s second cell therapy product in development. It is designed to treat bone marrow that is unable to produce enough blood cells due to a variety of causes, including acute radiation syndrome (ARS), certain cancers or cancer treatments, or immune-mediated bone marrow failure. PLX-R18’s first animal studies to prove their activity in ARS, as reflected in the new patent, were performed in collaboration with Prof. Gorodetsky at Hadassah Medical Center. Further preclinical data from trials conducted by the U.S. National Institutes of Health, Hadassah, the Charite in Berlin and other prominent research institutions have shown that PLX-R18 cells secrete a range of specific proteins that trigger the regeneration of bone marrow hematopoietic cells, thereby supporting the recovery of blood cell production. Pluristem is currently enrolling patients in a U.S. Phase I trial of PLX-R18 in incomplete bone marrow recovery following hematopoietic cell transplantation (HCT) and is preparing for a pivotal trial in ARS.
About Pluristem Therapeutics

Pluristem Therapeutics Inc. is a leading developer of placenta-based cell therapy products. The Company has reported robust clinical trial data in multiple indications for its patented PLX (PLacental eXpanded) cells, and is entering late-stage trials in several indications. PLX cell products 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; Company-owned and operated, GMP-certified manufacturing and research facilities; 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 that it believes that PLX-R18 has the potential to treat a broad range of hematologic indications and when it discusses the progress of its Phase I trial of PLX-R18 in the U.S. as well as its pivotal trial in ARS. 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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