Pluristem Enters into Agreement with Tel Aviv Sourasky Medical Center to Conduct Phase I/II Trial in Steroid-Refractory Chronic GvHD

- ***Tel Aviv Sourasky Medical Center will act as the sponsor of the study***
- ***PLX-PAD cells have demonstrated efficacy in preclinical models of GvHD***

HAIFA, ISRAEL, November 6, 2017— Pluristem Therapeutics Inc. (NASDAQ: PSTI) (TASE: PSTI), a leading developer of placenta-based cell therapy products, today announced that it has signed an agreement with Tel Aviv Sourasky Medical Center (Ichilov Hospital) to conduct a Phase I/II trial in PLX-PAD cell therapy for the treatment of Steroid-Refractory Chronic Graft-versus-Host-Disease (GvHD).

The trial will be an investigator initiated study. As such, Tel Aviv Sourasky Medical Center will support the study and will be responsible for its design and implementation. Dr. Ron Ram, Director of the Hematology Blood and Marrow Stem Cell Transplantation Unit for the Tel Aviv Sourasky Medical Center will act as principal investigator.

GvHD is a potentially lethal complication of hematopoietic cell transplantation (HCT) from a donor. When a patient receives a donor's stem cells, the transplanted cells identify the patient's body as foreign and attack it. The chronic form of GvHD occurs at least 100 days following the transplantation. The GvHD market is predicted to exceed $500 million by 2023.

Preclinical studies showed that Pluristem's PLX-PAD cell product potentially mitigates symptoms of GvHD, and in addition the secretion profile and mechanism of action properties suggest that it may be a novel and effective treatment for the condition. Pluristem hopes to address this severe unmet medical need and help patients lead full lives after undergoing a transplant.

"We're excited to work with Pluristem towards developing an effective treatment for chronic GvHD," noted Dr. Ron Ram at the Tel Aviv Sourasky Center. "Our Clinical Research Center is a hub for groundbreaking treatments and is the perfect testing ground for Pluristem's cell therapy."

"Studies have shown that our PLX cells have beneficial effects in a number of hematologic indications. We are very pleased to enter into this collaboration with Tel Aviv Sourasky Medical Center while continuing to focus on advancing our lead indications into pivotal and Phase III studies," said Zami Aberman, Chairman and Co-CEO of Pluristem. "Our unique, proprietary technology platform and the versatility of our cells allow us to develop our cell products to treat a number of conditions with inadequate treatment options. We look forward to offering new hope to patients worldwide"

About Chronic GvHD

Chronic GvHD occurs in approximately 40% of patients who have received a transplant of hematopoietic stem cells sourced from the bone marrow or peripheral blood of a donor. These hematopoietic stem cell transplants are used to treat some blood or bone marrow cancers as well as other hematologic conditions, such as aplastic anemia, which are not related to cancer. The donated cells identify the recipient's body as foreign and attack it as a result. While acute GVHD usually appears in the first 100 days after a transplant, and in specific body systems, chronic GvHD can occur at any time (even several years) after a transplant, and may manifest in many parts of the body such as: skin, mouth, eyes, liver, intestines, lungs

and joints. Long term immunosuppression is given to try to prevent or treat chronic GvHD. Since this treatment suppresses the immune system for a very long time, patients are at high risk of infections, and are prescribed multiple medications to try to address this major risk.

About Pluristem Therapeutics

Pluristem Therapeutics is a leading developer of placenta-derived cell therapy products with patented PLX (PLacental eXpanded) cells entering late-stage trials in several indications. Our PLX cell products each release a different 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 3D expansion technology and can be administered to patients without tissue matching or immunosuppression. Pluristem has Company-owned and operated, GMP-certified manufacturing and research facilities, a strong intellectual property position, and strategic relationships with major research and U.S. government institutions.

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 its discusses its proposed Phase I/II trial studying Pluristem's PLX-PAD cell therapy, the potential for PLX-PAD and Pluristem's hopes to address GvHD to help patients lead full lives after undergoing a transplant. 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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