Pluristem to Deliver Key Commercialization and Scientific Presentations at International Society for Cellular Therapy Conference 2014

Pluristem's Dr. Ohad Karnieli Confirmed as Chair of ISCT's Influential Process and Product Committee for a 2-Year Post

HAIFA, ISRAEL, April 16, 2014- Pluristem Therapeutics, Inc. (NasdaqCM: PSTI; TASE: PLTR), a leading developer of placenta-based cell therapies, announced today that Dr. Ohad Karnieli, Vice President of Development and Manufacturing, and Lena Pinzur, Basic and Preclinical Research Manager, will deliver presentations at the International Society for Cellular Therapy (ISCT) 2014 Conference which will take place in Paris, France on April 23rd through 26th, 2014. Additionally, Racheli Ofir, Vice President of Research & IP will be participating in ISCT's Industry Education Subcommittee. The ISCT is a global society of clinicians, regulators, technologists, and industry partners with a shared vision to translate cellular therapy into safe and effective treatments to improve patients' lives. Pluristem supports the advancement of cell therapy not only through its breakthrough technologies, but also through active participation in industry organizations like ISCT that play a key role in shaping the future of the industry.

Dr. Ohad Karnieli was recently confirmed as Chair of ISCT's Process and Product Committee for a two-year post.

"I am honored to serve as Chair of ISCT's Process and Product Committee. The committee acts as a leading force in the cell therapy industry by bringing together industry and academia to set standards and best practices that move cell therapy forward into commercialization for the benefit of patients. I look forward to making key contributions towards the committee's goals," stated Dr. Karnieli.

Dr. Karnieli will co-chair a presentation and panel discussion with Dr. Knut Niss of Novartis titled, "Process and Product Development Innovation," during the Strategies for Commercialization track on April 26th from 1:15 pm - 2:45 pm.

On April 25th from 5:00 pm - 6:30 pm, Ms. Pinzur will present a poster titled, "PLX-PAD Cell Treatment Mitigates Toll-Like Receptor Agonist-Induced Preeclampsia Symptoms in Mice." The research findings are based on pre-clinical studies conducted in conjunction with the Department of Internal Medicine, Division of Nephrology & Hypertension, Texas A&M Health Science Center and Scott & White Healthcare. Data from the study suggest that Pluristem's PLX-PAD cell treatment exerts beneficial effects by reducing inflammation and placental injury and demonstrate that PLX-PAD cells may be a potential novel therapeutic approach for the treatment of

preeclampsia.

About Pluristem Therapeutics

Pluristem Therapeutics Inc. is a leading developer of placenta-based cell therapies. The Company's patented PLX (PLacental eXpanded) cells are a drug delivery platform that releases a cocktail of therapeutic proteins in response to a host of local and systemic inflammatory and ischemic diseases. PLX cells are grown using the company's proprietary 3D micro-environmental technology and are an "off-the-shelf" product that requires no tissue matching prior to administration.

Pluristem has a strong intellectual property position, company-owned GMP certified manufacturing and research facilities, strategic relationships with major research institutions and a seasoned management team. For more information visit www.pluristem.com, the content of which is not part of this press release.

Safe Harbor Statement

This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 and federal securities laws. In addition, historic results of scientific research and clinical and preclinical trials do not guarantee that the conclusions of future research or trials would not suggest different conclusions or that historic results referred to in this press release would be interpreted differently in light of additional research and clinical and preclinical trials results. 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; we may encounter delays or obstacles in launching and/or successfully completing our clinical trials; our products may not be approved by regulatory agencies, our technology may not be validated as we progress further and our methods may not be accepted by the scientific community; we may be unable to retain or attract key employees whose knowledge is essential to the development of our products; unforeseen scientific difficulties may develop with our process; our products may wind up being more expensive than we anticipate; results in the laboratory may not translate to equally good results in real surgical settings; results of preclinical studies may not correlate with the results of human clinical trials; our patents may not be sufficient; our products may harm recipients; changes in legislation; 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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