Results of Pluristem's Phase I/II Muscle Injury Trial to be Announced on January 21, 2014

Principal Investigator of the study will join Pluristem management to announce results at the Tel Aviv Stock Exchange

HAIFA, ISRAEL, January 06, 2014 — Pluristem Therapeutics Inc. (NasdaqCM: PSTI; TASE: PLTR), today announced that the results of the company's Phase I/II clinical trial testing the safety and efficacy of PLacental Expanded (PLX-PAD) cells for the treatment of muscle injury will be presented on January 21, 2014.

The Principal Investigator of the study will join Pluristem's management to discuss these results as part of Pluristem's Regenerative Medicine Day to be held on the above date at the Tel Aviv Stock Exchange, Tel Aviv Israel.

This randomized, placebo-controlled, double blinded study was conducted at the Orthopedic Clinic on the campus of the Charité University Medical School under the auspices of the Paul-Ehrlich-Institute (PEI), Germany's health authority. The injured muscle studied was the gluteal buttock muscle that has been surgically traumatized during total hip replacement surgery.

The study was comprised of 3 treatment groups, two PLX-PAD groups of different doses and one placebo group. The primary endpoints of the study include safety and the maximal contraction force of the gluteal muscle at six months post-surgery. The secondary efficacy endpoints include an analysis of the macrostructure and microstructure of the gluteal muscle using magnetic resonance imaging (MRI) and biopsy.

"We look forward to receiving the results from this important orthopedic study. Data from this clinical trial will give us information regarding other potential surgical orthopedic injuries and non-surgical sports related injuries for which our PLX-PAD cells may be beneficial," stated Zami Aberman, Chairman and CEO of Pluristem. "This Phase I/II study marked the first time PLX-PAD cells were used to address surgically induced muscle injury."

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 in-

flammatory 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. For example, when we discuss receiving and announcing the result of our Phase I/II muscle injury trial, we are using forward-looking statements. 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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