Pluristem Awarded a $2.4 Million Grant from Israeli Government

HAIFA, ISRAEL, January 18, 2012 – Pluristem Therapeutics, Inc. (NasdaqCM:PSTI; TASE:PLTR), today announced that its wholly owned subsidiary, Pluristem Ltd., has received approval for a NIS 9 million (approximately $2.4 million) grant from the Office of the Chief Scientist (OCS) within the Israeli Ministry of Industry, Trade and Labor. Once received, the grant will be used to cover R&D expenses for the period March 2011 to February 2012.

The Office of the Chief Scientist of the Ministry of Industry, Trade and Labor, empowered by the Law for the Encouragement of Industrial Research & Development – 1984 (R&D Law), oversees all Government sponsored support of R&D in the Israeli hi-tech and bio-tech industries. This broad-spectrum support stimulates the development of innovative state-of-the art technologies, enhances the competitive power of the industry in the global high-tech market, creates employment opportunities and assists in improving Israel's balance of payments.

About Pluristem Therapeutics Inc.

Pluristem Therapeutics Inc. (NasdaqCM: PSTI; TASE: PLTR) is a leading developer of placenta-based cell therapies. The company's patented PLX (PLacental eXpanded) cells drug delivery platform releases a cocktail of therapeutic proteins in response to a variety of local and systemic inflammatory 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 or immune-suppression treatment prior to administration.

Data from two Phase I safety and dose determining clinical trials indicate that Pluristem's first PLX product candidate, PLX-PAD, is safe and potentially effective for the treatment of end stage peripheral artery disease. Pluristem's pre-clinical animal models have demonstrated PLX cells are also potentially effective in treating nerve pain and muscle damage when administered locally and in inflammatory bowel disease, MS and stroke when administered systemically.

Pluristem has a strong patent portfolio, GMP certified manufacturing, research and development facilities, strategic relationships with major research institutions and a seasoned management team.

For more information visit www.pluristem.com and follow Pluristem on Twitter

@Pluristem, the contents of which are not part of this press release.

CLICK HERE to watch a video where CLI patients and doctors involved in the clinical trials share their stories.

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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, we are using forward looking statements when we discuss the future receipt of the grant from the Office of the Chief Scientist, or when we discuss the safety and potential effectiveness of PLX-PAD for the treatment of end stage peripheral artery disease, or when we discuss the potential effectiveness of PLX cells in treating nerve pain and muscle damage and in inflammatory bowel disease, MS and stroke. These forward-looking statements 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: delay in payment of the grant by the Israeli government; changes in technology and market requirements; we may encounter delays or obstacles in launching our clinical trials; 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; 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.