Pluristem Announces Encouraging Six-Month Follow-up Results of its Phase I Critical Limb Ischemia Clinical Trials

HAIFA, ISRAEL, April 13, 2011 -- Pluristem Therapeutics Inc. (NasdaqCM: PSTI; TASE: PLTR;), today announced that following completion of three and six month clinical follow-up, data from its two open-label, dose-escalation, Phase I clinical trials conducted in the US and Germany suggests that Pluristem's placenta-derived cell therapy, PLX-PAD, is safe, improves quality of life, and is potentially effective in treating patients and reducing amputations in those suffering from Critical Limb Ischemia (CLI), the end-stage of Peripheral Artery Disease (PAD). Among the 27 patients treated with PLX-PAD, only one amputation was recorded, representing a 3.7% amputation rate. This represents a 75% reduction in amputation rate compared to historical data, which varies from 20-40%.

Full results of Pluristem's clinical trials are expected to be published in a peer-reviewed journal within the next few months.

According to Hirsch et al., ACC/AHA Practice Guidelines, chronic CLI is associated with a 1-year mortality rate greater than 20%. Nearly half of the cases will require revascularization for limb salvage and among those who have unreconstructable disease, approximately 40% will require major amputation within 6 months of initial diagnosis.

"The results of these trials provide an indication that our PLX-PAD product, intended for the treatment of various stages of PAD, could help millions of patients around the world," said Zami Aberman, Chairman and CEO of Pluristem. "We look forward to conducting the next phase of testing PLX-PAD in the treatment of Intermittent Claudication (IC) and CLI and taking the next steps towards moving this cell therapy product candidate towards future approval as therapy for PAD patients."

About Pluristem Therapeutics

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. The PLX-PAD comprehensive clinical development plan has been recognized by both the EMA and FDA, targeting a sub-population of 20 million patients in the Peripheral Artery Disease (PAD) market.

Pluristem has a strong patent portfolio, company-owned GMP certified manufacturing and research facilities and strategic relationships with major research institutions. For more information visit www.pluristem.com, the content of which is not part of this press release. Follow Pluristem on Twitter @Pluristem.

CLICK HERE to watch a video where CLI patients and doctors involved with the clinical trials share their stories. CLICK HERE to see Pluristem's cell therapy product animation on YouTube.

Contact:

Pluristem Therapeutics Inc.
William Prather R.Ph., M.D.
Sr. VP Corporate Development
1-303-883-4954
William.PratherMD@pluristem.com

Pluristem Therapeutics Inc.
Daya Lettvin
Investor & Media Relations Director
+972-54-647-5580
daya@pluristem.com

Media Contact:

Matthew Krieger
Ruder Finn – for Pluristem
+972-54-467-6950
matthew@ruderfinn.co.il

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 say that data from our two open-label, dose-escalation, Phase I clinical trials suggests that Pluristem's placenta-derived cell therapy, PLX-PAD, is safe, improves quality of life,

and is potentially effective in treating patients and reducing amputations in those suffering from Critical Limb Ischemia (CLI), the end-stage of Peripheral Artery Disease (PAD), or when we say that full results of our clinical trials are expected to be published in a peer-reviewed journal within the next few months, or when we say that the results of our phase I clinical trials provide an indication that our PLX-PAD product could help millions of patients around the world, or when we say that we look forward to conducting the next phase of testing PLX-PAD in the treatment of Intermittent Claudication (IC) and CLI and taking the next steps towards moving this cell therapy product candidate towards future approval as therapy for PAD patients. 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: 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.