Pluristem Selects Rotator Cuff Repair as New Orthopedic Indication

PLX cells offer potential as first off-the-shelf product for muscle and tendon regeneration

HAIFA, ISRAEL, June 25, 2014 -- Pluristem Therapeutics Inc. (NasdaqCM: PSTI) TASE: PLTR), a leading developer of placenta-based cell therapies, today announced it has selected rotator cuff repair as the second indication in its orthopedic clinical program. The Company's PLacental eXpanded (PLX) cells offer potential as the first off-the-shelf cell therapy product for muscle and tendon regeneration that can be used to enhance repair after rotator cuff surgery. There are currently no FDA-approved therapies using engineered cells for the treatment of rotator cuff injuries.

According to the American Academy of Orthopaedic Surgeons (AAOS), nearly 2 million patients in the U.S. seek help for their rotator cuff injuries. The incidence of these injuries increases with age, so as the U.S. population ages the prevalence and potential cost burden is likely to grow.

"Following the favorable results of our Phase I/II trial in our first orthopedic indication, the treatment of injured gluteal muscle after total hip replacement, we, together with Key Opinion Leaders in orthopedic surgery, selected rotator cuff repair as an important indication in need of a novel cell therapy solution. We are progressing with our study design, and are considering the addition of a third orthopedic indication," stated Pluristem CEO Zami Aberman.

"There is a clear and unmet need for a new kind of therapy that can improve the outcome of orthopedic surgery for rotator cuff tears. Our PLX cells can be administered as a simple office procedure. The team of Key Opinion Leaders advising us is particularly excited by the potential of a non-invasive, effective cell therapy for orthopedic indications," added Aberman.

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. For example, we are using forward-looking statements, when we discuss our plan to enter into clinical trials for rotator cuff repair indication, or that our PLX cells offer potential as the first off-the-shelf cell therapy product for muscle and tendon regeneration that can be used to enhance repair after rotator cuff surgery, or that we are considering the addition of a third orthopedic indication, or when we discuss the potential of a non-invasive, effective cell therapy for orthopedic indications . 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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