Pluristem Strengthens Its Manufacturing Competitive Advantage, Presents its First Proprietary Serum-Free Cell Therapy Product

This marketing grade serum-free media enables Pluristem large-scale, highly consistent production with operational independency from third party suppliers

HAIFA, Israel, June 17, 2019 - Pluristem Therapeutics Inc. **(Nasdaq:PSTI) (TASE:PSTI)**, a leading regenerative medicine company developing novel placenta-based cell therapy products, today announced the Company has developed a serum-free formulation to support the manufacturing of cell therapy products. This serum-free media formulation was developed using Pluristem's deep understanding in cell therapy industrial scale production standards, and the quality methods designed to support implementation in Phase III development and marketing. Achieving this significant technological challenge enables Pluristem large-scale, highly consistent production with operational independency from third-party suppliers for standard serum, an expensive and quantity limited product. PLX-R18 is the first product that Pluristem intends to manufacture using the serum-free media.

Cell therapy products, like Pluristem's PLX cells, are grown in cell culture media, whose particular composition and quality are essential to manufacture a desired cell product. Products manufactured using Pluristem's serum-free media demonstrated comparable potency, quality and cellular composition compared to production that relies on serum-containing media. Pluristem's serum free media formulation supports cell therapy production in both standard two-dimensional cell culture and the proprietary three-dimensional bioreactor-based cell culture platform that is unique to Pluristem. In addition, unlike standard cell culture media, which often contain undefined blood derived materials, Pluristem believes that its serum-free media formulation will result in a reduced risk of contaminates.

"Pluristem is in the midst of its final pivotal studies, which we are targeting for marketing approval, and believes that quantity and quality are both vital in manufacturing cell therapies products, so that such products will be accessible to any patient who needs them," said Pluristem chairman and co-CEO Zami Aberman. "We are pleased that in adopting serum-free formulation to grow our cells, Pluristem will elevate the standard of cell therapy production and we believe we will be able to increase our supply volume while, in parallel, shift away from third-party serum manufacturers with limited supply. The evolving industry is attempting to move toward serum-free cell therapy production, and this achievement speaks to the strength of our proprietary R&D and manufacturing capabilities."

About Pluristem Therapeutics

Pluristem Therapeutics Inc. is a leading regenerative medicine company developing novel placenta-based cell therapy product candidates. The Company has reported robust clinical trial data in multiple indications for its patented PLX cell product candidates and is currently conducting late stage clinical trials in several indications. PLX cell product candidates are believed to release a range of therapeutic proteins in response to inflammation, ischemia, muscle trauma, hematological disorders and radiation damage.

The cells are grown using the Company's proprietary three-dimensional expansion technology and can be administered to patients off-the-shelf, without tissue matching. Pluristem has a strong intellectual property position; a Company-owned and operated GMP-certified manufacturing and research facility; strategic relationships with major research institutions; and a seasoned management team.

Safe Harbor Statement

This press release contains express or implied forward-looking statements within the Private Securities Litigation Reform Act of 1995 and other U.S. Federal securities laws. For example, Pluristem is using forward-looking statements when it discusses its ability to manufacture cell therapy products using a serum-free formulation enables it to produce large-scale, highly consistent production with operational independency from third-party suppliers for standard serum and that in adopting a serum-free formulation to grow its cells, that PLX-R18 is the first product candidate that Pluristem intends to manufacture using the serum-free media, the belief that Pluristem's serum-free media formulation will result in a reduced risk of contaminates, that Pluristem is targeting marketing approval for its final pivotal studies and that Pluristem will elevate the standard of cell therapy production and believes it will be able to increase its supply volume while, in parallel, shift away from third-party serum manufacturers with limited supply. 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; Pluristem may encounter delays or obstacles in launching and/or successfully completing its clinical trials; Pluristem's products may not be approved by regulatory agencies, Pluristem's technology may not be validated as it progresses further and its methods may not be accepted by the scientific community; Pluristem may be unable to retain or attract key employees whose knowledge is essential to the development of its products; unforeseen scientific difficulties may develop with Pluristem's process; Pluristem's products may wind up being more expensive than it anticipates; results in the laboratory may not translate to equally good results in real clinical settings; results of preclinical studies may not correlate with the results of human clinical trials; Pluristem's patents may not be sufficient; Pluristem's products may harm recipients; changes in legislation may adversely impact Pluristem; 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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