

Pluristem Files Patent Application for the Use of its Advanced Manufacturing Technology in the Cannabis Industry

Company is exploring the opportunity to utilize its proprietary 3-D cell culturing technology in the manufacturing of cannabinoid-producing cells

HAIFA, Israel, May 6, 2019 - Pluristem Therapeutics Inc. (Nasdaq:PSTI) (TASE:PSTI), a leading regenerative medicine company developing novel placenta-based cell therapy products, today announced that it has filed a U.S. provisional patent application titled "Methods and Compositions for Producing Cannabinoids," which covers the use of Pluristem's state-of-the-art, proprietary 3-D cell culturing technology for the potential manufacturing of cannabinoid-producing cells.

The potential of successful adaptation to the industrial production of cannabinoid is to shift the cannabis industry from agriculture-based growing, which consists of resource-intensive and low-yield processes, into a full Good Manufacturing Practice (GMP) 3-D cell culturing platform for growing and expanding cannabinoid-producing cells in an automated and controlled manner at potentially significantly higher scales with the batch-to-batch consistency of commercial-grade products.

"We believe that Pluristem's key competitive advantage is its advanced manufacturing platform that we developed in order to secure our leading position in the cell therapy industry with several product candidates in phase III studies" said Pluristem President and Co-CEO, Yaky Yanay. "Any future development with respect to cannabinoid producing cell is expected to include third party funding of development expenses. Further, in exploring such development, Pluristem intends to comply with applicable regulations and Nasdaq standards."

"We believe that the cannabis industry could be a very attractive opportunity to further leverage our advanced technology and manufacturing capabilities, while maintaining our competitive advantage in the cellular therapy field," added Mr. Yanay. "Pluristem's management team is focused on the advancement of our PLX cell therapy products and is making the necessary preparations for entering the marketing phase. In parallel, we look forward to further exploring the potential contribution our technology has on developing next-generation cannabinoid production while also potentially creating significant value for Pluristem's shareholders."

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 that is exploring the opportunity to utilize its proprietary 3-D cell culturing technology in the manufacturing of cannabinoidproducing cells, that any future development with respect to cannabinoid producing cells is expected to include third party funding of development expenses, that in exploring its cannabis related technology, Pluristem intends to comply with applicable regulations and Nasdaq listing standards, its belief that the cannabis industry could be a very attractive opportunity to further leverage its advanced technology and manufacturing capabilities and that while its management is focused on preparing for marketing approval of its PLX cells, it is also looking forward to further exploring the potential contribution its technology has on developing next-generation cannabinoid production while also potentially creating significant shareholder value. 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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