

PLURISTEM PROPOSES TO LAUNCH A PUBLIC OFFERING OF COMMON STOCK ON THE TEL AVIV STOCK EXCHANGE AFTER CONCLUDING AN ISRAELI INSTITUTIONAL INVESTORS TENDER

Haifa, Israel – October 29, 2017 – Pluristem Therapeutics Inc. (NASDAQCM: PSTI, TASE: PLTR) announced today that in connection with its proposed public offering of its shares of Common Stock on the Tel Aviv Stock Exchange (TASE) it has concluded an Israeli institutional investors tender. In the tender the Company has received overall commitments from Israeli institutional investors and accredited investors for the purchase of 8,873,700 shares in different prices for a total amount of approximately \$15 million and chose to accept commitments of 7,123,700 shares at a purchase price of \$1.61 (or NIS 5.70 per share) for a total amount of approximately \$11.5 million. Upon the approval of the TASE, the Company intends to conduct a public offering of its shares on the TASE on Monday, October 30, 2017 at a minimum purchase price of \$1.61, for up to 9,000,000 shares in the aggregate (including those shares underlying the institutional investors' commitments specified above).

The Company has engaged Leader Underwriters (1993) Ltd. ("Leader") as its advisor for the offering. Leader is not purchasing or selling any of the shares offered in the offering in its capacity as an advisor nor is Leader required to arrange for the sale of any specific number or dollar amount of securities, but has agreed to use its best efforts to arrange for the sale of the securities offered.

The closing of the offering is expected to occur on or about October 31, 2017, subject to customary closing conditions. The Company intends to use the net proceeds of the offering for research and product development activities, clinical trial activities, investment in capital equipment and for working capital and other general corporate purposes. In order to participate in the public offering, prospective investors should place orders through their brokers.

This press release does not constitute an offer to sell, or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such an offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The securities described above are being offered by the Company pursuant to an Israeli "shelf" registration statement previously filed with the Israel Securities Authority and the Tel Aviv Stock Exchange, an Israeli "prospectus supplement" filed with the Israel Securities Authority and the Tel Aviv Stock Exchange on October 30, 2017 as well as pursuant to a "shelf" registration statement previously filed with and declared effective by the Securities and Exchange Commission (the "SEC") on June 30, 2017. The U.S. prospectus supplement related to the offering and the related prospectus are expected to be filed with the SEC and copies can be obtained by contacting the Company at MATAM Advanced Technology Park, Building No. 5, Haifa, Israel 31905 or at 011-972-74-710-8600.

About Pluristem Therapeutics

Pluristem Therapeutics is a leading developer of placenta-derived cell therapy products with patented PLX (PLacental eXpanded) cells entering late-stage trials in several indications. Our PLX cell products each release a different 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 3D expansion technology and can be administered to patients without tissue matching or immunosuppression. Pluristem has Company-owned and operated, GMP-certified manufacturing and research facilities, a strong intellectual property position, and strategic relationships with major research and U.S. government institutions.

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 the expected launch of its public offering in Israel, the closing of its public offering and its intended use of proceeds. 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: market risks and uncertainties and risks and uncertainties relating to the satisfaction of customary closing conditions for the offering of Pluristem's securities; 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 SEC.

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