



Pluristem to Present New Data on PLX-R18 at American Society of Hematology's Annual Meeting

Data show the mechanism of action by which PLX-R18 treats radiation-induced bone marrow damage

HAIFA, ISRAEL, November 17, 2015 -- [Pluristem Therapeutics Inc.](#) (NasdaqCM: PSTI, TASE: PSTI), a leading developer of placenta-based cell therapy products, today announced that Dr. Racheli Ofir, Vice President Research & Intellectual Property, will present new data on PLX-R18 cells at the [American Society of Hematology's](#) (ASH) 57th Annual Meeting to be held in Orlando, Florida, from December 5-8, 2015.

The poster presentation titled "Mechanism of Action of PLX-R18, a Placental-Derived Cellular Therapy for the Treatment of Radiation-Induced Bone Marrow Failure", will be delivered during Program Session 508: Bone Marrow Failure, on December 6, 2015, at 8:00 PM. The poster will describe data from preclinical studies on irradiated mice showing the mechanism of action by which PLX-R18 cells mitigate the damage to bone marrow caused by exposure to high levels of radiation, such as could occur in a nuclear catastrophe. The poster abstract will be published online in the December 3, 2015 supplemental volume of *Blood*, a peer-reviewed medical journal published by ASH.

The mechanism of action was revealed through a series of trials conducted in conjunction with Charité Universitätsmedizin Berlin Institute of Medical Immunology, the Brandenburg Center of Regenerative Therapy in Berlin, the Sharett Institute of Oncology, Hadassah Hebrew University Medical Center in Jerusalem, and Indiana University; the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), provided support for the research conducted at Indiana University. A previously published article has already described the improved survival overall as well as restoration of bone marrow function in irradiated animals treated with PLX-R18 cells.

"We have a growing body of preclinical evidence demonstrating PLX-R18's profound capacity to generate and regulate an adaptive cell response to in vivo chemical signals from damaged tissue; this response, a tailored, time-dependent secretion of a broad array of cytokines that contribute to the healing of the hematopoietic and immune systems, was shown to protect and restore bone marrow function," stated Pluristem CEO Zami

Aberman. “We are pleased to present this latest data on the mechanism of action of our cells to the world’s thought leaders in hematology and bone marrow failure at this year’s ASH conference.”

About PLX-R18

PLX-R18 is Pluristem’s second off-the-shelf cell therapy in development. It is designed to treat bone marrow that is unable to produce blood cells due to a variety of causes including ARS, certain cancers or cancer treatments, and immune-mediated bone marrow failure. Pluristem is preparing to initiate a Phase I trial of PLX-R18 in incomplete bone marrow recovery following hematopoietic cell transplantation, and, in collaboration with the NIH, a late-stage trial in ARS. With its capabilities, PLX-R18 could potentially treat a broad range of indications related to bone marrow function, which together constitute a substantial global market.

About Pluristem Therapeutics

Pluristem Therapeutics Inc. is a leading developer of placenta-based cell therapy products. The Company has reported robust clinical trial data in multiple indications for its patented PLX (PLacental eXpanded) cells. The cells release a cocktail of therapeutic proteins in response to inflammation, ischemia, hematological disorders, and radiation damage. PLX cell products are grown using the Company's proprietary three-dimensional expansion technology. They are off-the-shelf, requiring 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.

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 initiate a Phase I trial of PLX-R18 in incomplete bone marrow recovery following hematopoietic cell transplantation and, in collaboration with the NIH, a late-stage trial in ARS, and when we discuss PLX-R18’s potential to treat a broad range of indications related to bone marrow function, which together constitute a substantial global market. 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 clinical 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. 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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