



Pluristem's Preclinical Results for its PLX-RAD Cells Published in the Journal PLOS ONE

Pluristem's cells were reported to serve as highly effective "off the shelf" therapy to treat acute radiation syndrome and radiation induced bone marrow failure in animals

HAIFA, Israel June 20, 2013 -- [Pluristem Therapeutics Inc.](#) (NASDAQCM: PSTI) (TASE:PLTR), a leading developer of placenta-based cell therapies, announced today that preclinical results for its Placental eXpanded (PLX) RAD cells in the treatment of bone marrow disease have been published in peer reviewed journal PLOS ONE.

A study titled "Mitigation of lethal radiation syndrome in mice by intramuscular injection of 3D cultured adherent human placental stromal cells" was published on June 18th in the open access journal PLOS ONE (<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0066549>). This animal study on acute radiation syndrome (ARS) was performed by Professor Raphael Gorodetsky and his team at the Biotechnology and Radiobiology Laboratory at the Sharett Institute of Oncology at Hadassah Medical Center, Jerusalem in collaboration and the support of Pluristem Therapeutics. The findings of the published study suggest that intramuscular treatment with Pluristem's PLX-RAD cells may serve as a highly effective "off the shelf" therapy to mitigate ARS.

The treatment of intramuscular injection of PLX-RAD cells increased the survival of 7.7Gy irradiated mice from about 27% to about 98% ($P < 0.0001$). The treated mice regained their weight significantly faster than the few survivors of the controls. The treatment stimulated extensive hematopoietic stem cells (HSC) proliferation to enable the speedy recovery of the radiation induced depleted bone marrow with parallel increase the number of circulating white blood cells, red blood cells and platelets. The number of CD45+/SCA1+ hematopoietic progenitor cells within the fast recovering population of nucleated bone marrow cells in the irradiated mice was also elevated in the mice treated with PLX-RAD cells.

Prof. Raphael Gorodetsky commented: "The intramuscular injection of PLX-RAD significantly increased the survival of animals exposed to high lethal doses of total body irradiation even when treatment was delayed by more than 24 hrs after exposure. Therefore, our study points for the application of such treatments in scenarios of nuclear accidents involving numerous casualties also in remote disaster areas".

“The current publication which follows our announcement from [07 September 2011](#), further supports Pluristem’s finding that the combination of the Placenta as a rich cell source and our propriety 3D manufacturing platform may lead to new product and therapies for unmet needs and will increase the level of awareness for our technology in the medical community,” stated Pluristem Chairman and CEO Zami 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.

About Hadassah University Medical Center

Hadassah is a state-of-the-art medical center incorporating all medical and surgical sub-specialties, with a tertiary care referral hospital at Ein Kerem and a community hospital on Mt. Scopus; Hadassah Hospitals have 850 physicians and Academic University Affiliated researchers, 1,940 nurses, 1,020 paramedical and support staff, 1,200 support staff, 1,200 beds, 31 operating theaters, 9 intensive care units and over 120 outpatient clinics treating over 1 million people a year from all over Israel and from neighboring countries. Hadassah's Hospitals conduct more than half the medical research in Israel. The flagship of Hadassah, the Women's Zionist Organization of America, is the main supporter of the Hadassah Medical Center.

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, when we discuss that the findings of the published study suggest that intramuscular treatment with Pluristem’s PLX-RAD cells may serve as a highly effective “off the shelf” therapy to mitigate ARS, or that the study points for the application of such treatments in scenarios of nuclear accidents involving numerous casualties also in remote disaster areas, or our finding that the combination of the Placenta as a rich cell source and our propriety 3D manufacturing platform may lead to new product and therapies for unmet needs, or that the study published in PLOS ONE will increase the level of awareness for our technology in the medical community, we are using forward-looking statements. These forward-looking statements and their implications are based on the current expectations only of the management of Pluristem and the involved academic researchers, 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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