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U.S. HEART ATTACK TRIAL UPDATE

'Most Exciting Stem Cell Therapy In Heart Research Today'

Melbourne, AUSTRALIA; 7 April 2008: Doctors at Houston's Texas Heart Institute held a press conference last Saturday (AEST) to provide an update on the ongoing multi-centre Phase 2 clinical trial of the proprietary mesenchymal precursor cell (MPC) technology in patients with heart attacks.

This is the first trial in the world to evaluate an allogeneic, or "off-the-shelf", stem cell therapy injected directly into damaged heart muscle by cardiac catheter. The trial's 25 patients are currently being enrolled at multiple sites in the United States by Mesoblast's sister company, Angioblast Systems Inc. Patients receive either placebo or one of three progressively increasing doses of the proprietary adult stem cells.

Texas Heart Institute's first patient, a 65-year-old man with weakened heart muscle function, was injected with the company's allogeneic stem cells last Thursday, 10 days after suffering a massive heart attack. The procedure went smoothly and the patient was discharged from hospital within 48 hours.

"I think this is the most exciting stem cell therapy in heart research today," said Dr Emerson Perin, director of the Stem Cell Center at the Texas Heart Institute at St. Luke's Episcopal Hospital and the study's leader. "Because these new cell types are so powerful and they are delivered directly to the heart damage, it should be great at promoting healing."

Each year in the United States, of the one million people who survive a heart attack, about 30 per cent go on to develop heart failure. The aim of the stem cell treatment is to prevent the onset of heart failure after a heart attack.

Dr James Willerson, co-leader of the trial and president-elect of the Texas Heart Institute, said: "Our expectation is that the stem cells will develop into blood vessel and heart muscle cells and heal the damage caused by the heart attack. People should be excited by this."

About The Texas Heart Institute

Founded by world-renowned cardiovascular surgeon Dr Denton A. Cooley in 1962, the Texas Heart Institute is a non-profit organisation dedicated to reducing the devastating toll of cardiovascular disease through innovative and progressive programs in research, education and improved patient care. Together with its clinical partner, St. Luke's Episcopal Hospital, it has been ranked among the top ten cardiovascular centres in the United States by *U.S. News & World Report's* annual guide to "America's Best Hospitals" for the past 17 years.



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About Mesoblast

Mesoblast Limited (ASX:MSB; USOTC:MBLTY) is committed to the development of novel treatments for orthopaedic conditions, including the rapid commercialisation of a unique adult stem cell technology aimed at the regeneration and repair of bone and cartilage. Our focus is to progress through clinical trials and international regulatory processes necessary to commercialise the technology in as short a timeframe as possible. Mesoblast has the worldwide exclusive rights for a series of patents and technologies that have been developed over more than 10 years and which relate to the identification, extraction and culture of adult Mesenchymal Precursor Cells (MPCs). The Company has also acquired 39% of Angioblast Systems Inc., an American company developing the platform MPC technology for the treatment of cardiovascular diseases including repair and regeneration of blood vessels and heart muscle. Mesoblast and Angioblast are jointly funding and progressing the core technology. Mesoblast's strategy is to maximise shareholder value through both corporate partnerships and the rapid and successful completion of clinical milestones.

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