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SUCCESSFUL CLINICAL OUTCOMES IN STEM CELL HEART TRIAL Heart Muscle Recovery Shown In All Patients

Key Points

- Successful conclusion of Australian stem cell Pilot Clinical Trial for heart disease
- Primary endpoint of safety at six months achieved with no cell-related adverse events
- All patients implanted with own, or autologous, cultured stem cells showed improvement in either symptoms of heart failure or heart function

Melbourne, Australia; 10 August 2007: Australia's adult stem cell company, Mesoblast Limited (ASX:MSB;USOTC:MBLTY), today announced the successful conclusion of the Australian Cardiac Pilot Trial it had been conducting together with its United States-based sister company Angioblast Systems Inc. at John Hunter Hospital in New South Wales.

This trial successfully met the primary six-month endpoint of safety in patients suffering from severe coronary artery disease and heart muscle damage who were implanted with their own, or autologous, cultured cells.

Principal Investigator, Dr Suku Thambar, interventional cardiologist at John Hunter Hospital and medical researcher with the Hunter Medical Research Institute, said that no cell-related adverse events were seen in any of the six patients followed for up to six months, and that all six had shown improvement in either symptoms of heart failure or in heart function.

"We are extremely encouraged by the degree of improvement in heart function and clinical symptoms in these very ill patients," Dr Thambar said.

Specifically:

- Heart muscle recovery was seen in all six patients within three months of cell implantation, as defined by either improvement in symptoms of heart failure or heart function
- Four of the six patients were assessed as having a reduced class of heart failure symptoms, as defined by the New York Heart Association (NYHA) scale for congestive heart failure
- Three out of three patients with reduced heart function before cell implantation, as defined by ejection fraction, demonstrated sustained improvement at three and/or six months
- Five of the six patients had reduction in anginal symptoms and use of anti-anginal medications.

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Mesoblast Chairman, Mr Michael Spooner, said he was delighted with the results of the pilot trial, which support Mesoblast's significant equity investment in Angioblast Systems Inc and the intrinsic value associated with its cardiovascular and other applications.

Mesoblast Founder, Professor Silviu Itescu, said that both companies were very pleased with the relationship with Cordis Corporation and Biosense Webster, who provided their latest cardiac catheter technology to deliver the proprietary cultured cells to damaged heart muscle. .

"All future clinical trials of the platform technology will focus on delivery of allogeneic, or 'off the shelf', stem cell products in order to make available to the broadest number of patients a safe, reproducible, and highly effective therapy," Professor Itescu added.

About Mesoblast

Mesoblast Limited (ASX:MSB; USOTC:MBLTY) is an Australian biotechnology company 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. 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 a significant interest in 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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