

asx announcement

ENROLMENT COMPLETE FOR SECOND GROUP OF HEART FAILURE PATIENTS TREATED WITH "OFF-THE-SHELF" ADULT STEM CELLS

Melbourne, Australia; 22 September 2009; Australia's regenerative medicine company, Mesoblast Limited (ASX:MSB), today announced successful completion of enrolment of the second group of 20 patients randomised to receive an increased dose of Revascor[™], the proprietary allogeneic, or "off-the-shelf", universal adult stem cell product for congestive heart failure.

The placebo-controlled trial is being run by Mesoblast's United States-based associate company Angioblast Systems Inc. and will randomise up to 60 patients suffering from congestive heart failure to three groups receiving either a progressively increasing dose of the company's allogeneic adult stem cells or standard of care.

Treated patients in the second group received a dose of Revascor[™] three times higher than in the first group. No cell or procedure-related adverse events have occurred in any of the 40 patients enrolled to date. Interim and final efficacy results will be reported when all patients meet the three and six-month endpoints.

Meeting clinical trial enrolment milestones on schedule continues to be an important objective of Mesoblast's equity-based investment in Angioblast. As a result of Angioblast's successful patient enrolment to date, in accordance with the terms of the Series B investment Mesoblast's equity holding in Angioblast has now converted into 38.4% common shares.

At Angioblast's next financing event, Mesoblast may seek to maintain or increase its shareholding.

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 developed over more than 10 years relating to the identification, extraction and culture of adult Mesenchymal Precursor Cells (MPCs). The Company has acquired 38.4% of Angioblast Systems Inc., an American company developing the platform MPC technology for the treatment of cardiac, vascular and eye 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. www.mesoblast.com

For more information, please contact: Julie Meldrum Corporate Communications Director Mesoblast Limited T: + 61 (0) 3 9639 6036 M: +61 (o) 419 228 128 E: julie.meldrum@mesoblast.com