

MESOBLAST APPOINTS NEW CHIEF FINANCIAL OFFICER

Melbourne, Australia; May 31, 2018 and New York; USA; May 30, 2018: Mesoblast Limited (ASX: MSB; Nasdaq: MESO) today announced the appointment of Josh Muntner as its new Chief Financial Officer, based in New York.

Chief Executive Dr Silviu Itescu welcomed the appointment of Mr Muntner stating he would bring substantial U.S. corporate finance, transactional and capital markets experience to Mesoblast.

Mr Muntner has accrued 20 years' experience in healthcare investment banking and corporate finance, and has been involved in a wide range of healthcare-related transactions with approximately \$11 billion in value. Most recently, he led corporate development and financial transactions at Nasdaq-listed biotechnology company, ContraFect Corporation. Previously, Mr Muntner served as Managing Director and Co-Head of Healthcare Investment Banking at Janney Montgomery Scott, and spent nine years at Oppenheimer & Co. and its U.S. predecessor, CIBC World Markets. He also served as an investment banker at Prudential Securities.

Mr Muntner said he was delighted to be joining Mesoblast as it transitions to a commercial organization. "Mesoblast is a dynamic company that is well positioned to capitalize on its portfolio of cell therapy product candidates with the potential to bring about paradigm-changing clinical outcomes."

The Mesoblast Board and management thanked outgoing Chief Financial Officer Paul Hodgkinson for his significant contribution over the past four years and wished him well in his future endeavors.

Ignite Partners advised Mesoblast on the appointment of Mr Muntner.

About Mesoblast

Mesoblast Limited (ASX: MSB; Nasdaq: MESO) is a global leader in developing innovative cell-based medicines. Through a proprietary process, Mesoblast selects highly purified mesenchymal lineage precursor and stem cells from the bone marrow of healthy adults, and creates master cell banks which can be industrially expanded to produce thousands of doses from each donor that meet stringent release criteria, have lot to lot consistency, and can be used off the shelf without the need for tissue matching.

The Company has leveraged its proprietary technology platform to establish a broad portfolio of late-stage product candidates. Mesoblast's allogeneic, 'off-the-shelf' cell product candidates are being evaluated in their ability to target advanced stages of diseases with high, unmet medical needs including cardiovascular conditions, orthopedic disorders, immunologic and inflammatory disorders and oncologic/hematologic conditions.

Forward-Looking Statements

This announcement includes forward-looking statements that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. Forward-looking statements should not be read as a guarantee of future performance or results, and actual results may differ from the results anticipated in these forward-looking statements, and the differences may be material and adverse. Forward-looking statements include, but are not limited to, statements about: the initiation, timing, progress and results of Mesoblast's preclinical and clinical studies, and Mesoblast's research and development programs; Mesoblast's ability to advance product

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candidates into, enroll and successfully complete, clinical studies, including multi-national clinical trials; Mesoblast's ability to advance its manufacturing capabilities; the timing or likelihood of regulatory filings and approvals, manufacturing activities and product marketing activities, if any; the commercialization of Mesoblast's product candidates, if approved; regulatory or public perceptions and market acceptance surrounding the use of stem-cell based therapies; the potential for Mesoblast's product candidates, if any are approved, to be withdrawn from the market due to patient adverse events or deaths; the potential benefits of strategic collaboration agreements and Mesoblast's ability to enter into and maintain established strategic collaborations; Mesoblast's ability to establish and maintain intellectual property on its product candidates and Mesoblast's ability to successfully defend these in cases of alleged infringement; the scope of protection Mesoblast is able to establish and maintain for intellectual property rights covering its product candidates and technology; estimates of Mesoblast's expenses, future revenues, capital requirements and its needs for additional financing; Mesoblast's financial performance; developments relating to Mesoblast's competitors and industry; and the pricing and reimbursement of Mesoblast's product candidates, if approved. You should read this press release together with our risk factors, in our most recently filed reports with the SEC or on our website. Uncertainties and risks that may cause Mesoblast's actual results, performance or achievements to be materially different from those which may be expressed or implied by such statements, and accordingly, you should not place undue reliance on these forward-looking statements. We do not undertake any obligations to publicly update or revise any forward-looking statements, whether as a result of new information, future developments or otherwise.

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