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FDA ACCEPTS MESOBLAST'S BIOLOGICS LICENSE APPLICATION (BLA) FOR RYONCIL® IN CHILDREN WITH STEROID-REFRACTORY ACUTE GRAFT-VERSUS-HOST DISEASE (SR-aGVHD)

If Approved, RYONCIL will be the First Allogeneic "Off-the-Shelf" Cellular Medicine in the US, and the First Cell Therapy for Children Up To 18 Years Old with SR-aGVHD.

Melbourne, Australia; July 23 and New York, USA; July 22, 2024: Mesoblast Limited (ASX:MSB; Nasdaq:MESO), global leader in allogeneic cellular medicines for inflammatory diseases, announced that the United States Food and Drug Administration (FDA) has accepted its Biologics License Application (BLA) resubmission for Ryoncil® (remestemcel-L) in the treatment of children with steroid-refractory acute graft versus host disease (SR-aGVHD). FDA considers the resubmission to be a complete response and Mesoblast anticipates a decision on or before the FDA's Prescription Drug User Fee Act (PDUFA) goal date of January 7, 2025.

Mesoblast's resubmission on July 8, 2024 addressed remaining CMC (Chemistry, Manufacturing, and Control) items after being informed by FDA at the end of March 2024 that, following additional consideration, the available clinical data from the Phase 3 study MSB-GVHD001 appears sufficient to support submission of the proposed BLA for remestemcel-L for treatment of pediatric patients with SRaGVHD. In May 2023, FDA conducted the Pre-License Inspection (PLI) of the manufacturing process for remestemcel-L, and this did not result in the issuance of any Form 483.

"We are pleased that FDA has accepted our BLA resubmission for review, and look forward to the potential approval of RYONCIL for children with SR-aGVHD," said Mesoblast CEO Dr. Silviu Itescu.

About Ryoncil® (remestemcel-L)
Mesoblast's lead product candidate, Ryoncil® (remestemcel-L), is an investigational therapy comprising culture expanded mesenchymal stromal cells derived from the bone marrow of an unrelated donor. It is administered to patients in a series of intravenous infusions. RYONCIL has immunomodulatory properties which counteract the inflammatory processes that are implicated in SR-aGVHD by inhibiting activation and proliferation of effector T cells, down-regulating the production of pro-inflammatory cytokines, and enabling recruitment of anti-inflammatory cells to involved tissues.

FDA granted remestemcel-L Fast Track designation, a process to facilitate the development and expedited review of therapies for serious conditions that fill unmet medical needs, and Priority Review designation, which is given to drugs that treat a serious condition and provide a significant improvement in safety or effectiveness over existing treatments.

About the Phase 3 Trial of Ryoncil® (remestemcel-L) in Children with Steroid-Refractory Acute Graft Versus Host Disease
The Phase 3 Study GVHD001/002 was conducted in 54 children (89% Grade C/D) across 20 centers in the US where RYONCIL was used as the first line of treatment for children who failed to respond to steroids for acute GVHD.[1] The trial met its pre-specified primary endpoint, Day 28 Overall Response (OR), 70.4% versus 45%, p=0.0003. An overall response at day 28 was highly predictive of improved survival through day 100 (87% compared to 47% in patients that did not achieve day 28 OR p= 0.0001).

Compared with a matched control group of pediatric subjects from the contemporaneous database of the Mount Sinai Acute GVHD International Consortium (MAGIC) treated with best available therapy, treatment with Ryoncil achieved higher Day 28 OR (70% vs 43%) and higher Day 100 survival (74% vs 57%). A propensity-matched study of outcomes in 25 children from Mesoblast's Phase 3 trial and 27 control children who received best available treatment, including ruxolitinib, from the MAGIC database showed that 67% of high-risk children (MAP scores >0.29) who received Ryoncil achieved a Day 28 overall response and were alive after 180 days compared to just 10% in both categories in the MAGIC group.

In addition, results of a 4-year survival study performed by the Center for International Blood and Marrow Transplant Research (CIBMTR) on 51 evaluable patients with SR-aGVHD who were enrolled in the Phase 3 trial, demonstrated durability of the survival benefits, with 67% survival at 6 months, 63% survival at 1 year, 51% at 2 years, and 49% survival through 4 years in children with expected 2 year survival of just 25-38% using best available therapy.[2-4]

About Steroid-Refractory Acute Graft Versus Host Disease
Acute GVHD occurs in approximately 50% of patients who receive an allogeneic bone marrow transplant (BMT). Over 30,000 patients worldwide undergo an allogeneic BMT annually, primarily during treatment for blood cancers, including about 20% in pediatric patients.[5,6] SR-aGVHD is associated with mortality as high as 90% and significant extended hospital stay costs.[7,8] There are currently no FDA-approved treatments in the US for children under 12 with SR-aGVHD.

Survival outcomes have not improved over the past two decades for children or adults with the most severe forms of SR-aGVHD.[2,9-10] The lack of any approved treatments for children under 12 means that there is an urgent need for a therapy that improves the dismal survival outcomes in children.

About Mesoblast
Mesoblast (the Company) is a world leader in developing allogeneic (off-the-shelf) cellular medicines for the treatment of severe and life-threatening inflammatory conditions. The Company has leveraged its proprietary mesenchymal lineage cell therapy technology platform to establish a broad portfolio of late-stage product candidates which respond to severe inflammation by releasing anti-inflammatory factors that counter and modulate multiple effector arms of the immune system, resulting in significant reduction of the damaging inflammatory process.

Mesoblast has a strong and extensive global intellectual property portfolio with protection extending through to at least 2041 in all major markets. The Company's proprietary manufacturing processes yield industrial-scale, cryopreserved, off-the-shelf, cellular medicines. These cell therapies, with defined pharmaceutical release criteria, are planned to be readily available to patients worldwide.

Mesoblast is developing product candidates for distinct indications based on its remestemcel-L and rexlemestrocel-L allogeneic stromal cell technology platforms. Remestemcel-L is being developed for inflammatory diseases in children and adults including steroid refractory acute graft versus host disease, and biologic-resistant inflammatory bowel disease. Rexlemestrocel-L is being developed for advanced chronic heart failure and chronic low back pain. Two products have been commercialized in Japan and Europe by Mesoblast's licensees, and the Company has established commercial partnerships in Europe and China for certain Phase 3 assets.

Mesoblast has locations in Australia, the United States and Singapore and is listed on the Australian Securities Exchange (MSB) and on the Nasdaq (MESO). For more information, please see www.mesoblast.com, LinkedIn: Mesoblast Limited and Twitter: @Mesoblast

References / Footnotes

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Mesoblast Limited
ABN 68 109 431 870
www.mesoblast.com

Corporate Headquarters
Level 38
55 Collins Street
Melbourne 3000
Victoria Australia
T +61 3 9639 6036
F +61 3 9639 6030

United States Operations
505 Fifth Avenue
Third Floor
New York, NY 10017
USA
T +1 212 880 2060
F +1 212 880 2061

Asia
21 Biopolis Road
#01-22 Nucleos (South Tower)
SINGAPORE 138567
T +65 6570 0635
F +65 6570 0176

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Forward-Looking Statements

This press release 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 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 (including any future decision that the FDA may make on the BLA for remestemcel-L for pediatric patients with SR-aGVHD), 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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For more information, please contact:

Corporate Communications / Investors
Paul Hughes
T: +61 3 9639 6036
E: investors@mesoblast.com

Media
BlueDot Media
Steve Dabkowski
T: +61 419 880 486
E: steve@bluedot.net.au