Mesoblast is a world leader in developing innovative cellular medicines.

We have established what we believe is the industry's most clinically advanced and diverse portfolio of cell-based products with three programs in active Phase 3 clinical studies.

Our lead product candidates under investigation are:

- MPC-150-IM for chronic heart failure
- MPC-06-ID for chronic low back pain due to disc degeneration
- MSC-100-IV for acute graft versus host disease
- MPC-300-IV for biologic refractory rheumatoid arthritis and diabetic nephropathy

We also have a strong emerging pipeline of products for follow-on indications.

The Company has leveraged its proprietary technology platform, which is based on specialized cells known as mesenchymal lineage adult stem cells (MLCs), to establish a broad portfolio of late-stage product candidates.

These allogeneic, 'off-the-shelf' cell product candidates target advanced stages of diseases with high, unmet medical needs including cardiovascular diseases, immune-mediated and inflammatory conditions, spine orthopedic disorders, and oncology and hematology diseases.

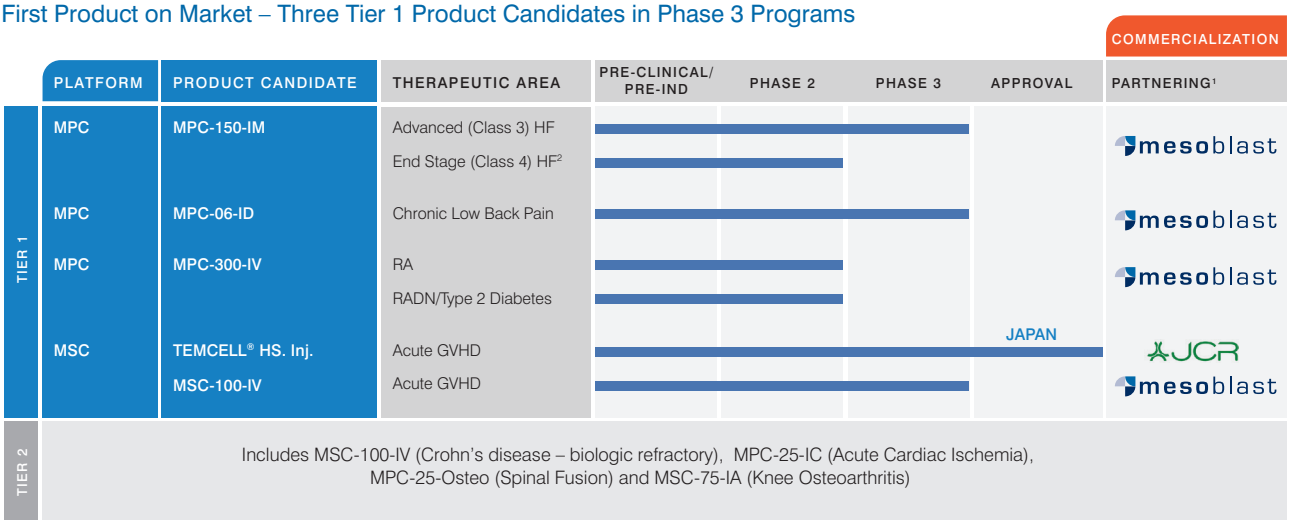
Our licensee in Japan has launched its mesenchymal stem cell-based product, which is the first allogeneic cell-based product to receive full approval in Japan.

We believe we are well positioned to have the first industrially manufactured allogeneic stem cell product approved in the United States for the treatment of acute graft versus host disease (aGVHD) in children.

Prioritized Portfolio of Clinically Distinct and Advanced Product Candidates

The majority of our time and resources are focused on our Tier 1 product candidates. Additionally, we have a strong pipeline of products for follow-on indications.

First Product on Market – Three Tier 1 Product Candidates in Phase 3 Programs



This chart is figurative and does not purports to show individual trial progress within a clinical program. For product registration purposes, Phase 3 programs may require more than one trial.
Tier 1 programs represent our lead programs where we focus the majority of our time and resources. Tier 2 programs are also in development and may advance to Tier 1 depending on the merit of newly generated data, market opportunity or partnering options.

1_On December 22, 2016, Mesoblast Ltd. entered into an equity purchase agreement with Mallinckrodt Pharmaceuticals for ~US$ 21.7m to exclusively negotiate a development and commercialization partnership for rights to GVHD and Chronic Low Back Pain outside of the Chinese and Japanese markets.
2_Clinical trial is fully funded by the National Institutes of Health (NIH).

Lead Product Candidates under Clinical Investigation

Each of the MLC-derived product candidates has its own distinct technical characteristics, target indications, individual reimbursement strategy, separate commercialization potential, and unique partnering opportunities.

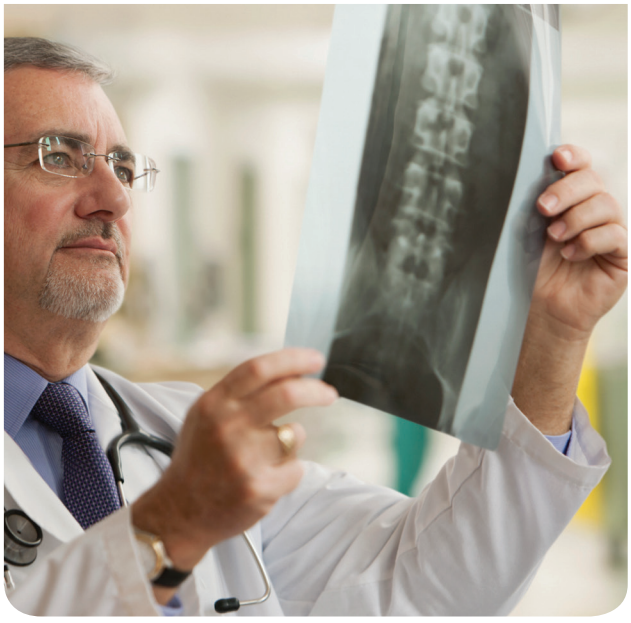
MPC-150-IM is our late-stage cardiovascular product candidate. Patients with advanced and end-stage heart failure represent a serious unmet medical need.

A Phase 3 trial is enrolling patients with advanced chronic heart failure across North America. Patients with advanced heart failure are expected to constitute the majority of the patients enrolled in this clinical trial program. In April 2017, the trial achieved a successful pre-specified interim futility analysis of the efficacy endpoint in the first 270 patients of the 600-patient trial and an independent data monitoring committee formally recommended the continuation of the trial.

The US National Institutes of Health is also conducting a 159-patient Phase 2b trial using MPC-150-IM in patients with end-stage CHF requiring mechanical circulatory support, which is due to complete enrollment in 2017.

MPC-300-IV is an intravenously-delivered immunomodulatory product candidate for the treatment of chronic inflammatory conditions, including biologic-refractory rheumatoid arthritis. Results of Mesoblast's 48-patient randomized, placebo-controlled Phase 2 trial in biologic refractory rheumatoid arthritis showed that a single intravenous infusion of MPC-300-IV was well tolerated, without serious adverse events, and demonstrated a dose-related improvement in clinical symptoms, physical function, and disease activity relative to placebo through the 12-week primary endpoint and durability through the 39-week follow-up period.

MPC-06-ID is our Phase 3 product candidate for the treatment of chronic low back pain due to disc degeneration (CLBP). Most current treatments for CLBP focus on pain relief rather than addressing the underlying degenerative nature of the disease. We believe MPC-06-ID has the potential to fill an unmet treatment gap for this large patient population. The Phase 3 trial is actively enrolling patients across the United States and Australia.



MSC-100-IV is our Phase 3 intravenously-delivered product candidate, which is being developed for the treatment of aGVHD following allogeneic bone marrow transplantation.

In an Expanded Access Program in the United States, 241 children were treated with MSC-100-IV for severe, multi-line refractory aGVHD. MSC-100-IV demonstrated clinically meaningful responses and significantly increased survival in children with this life-threatening disease.

To support filing of a biologic license application to the United States Food and Drug Administration (FDA) for regulatory approval, a 60-patient, open label Phase 3 trial using MSC-100-IV is being conducted as front-line therapy in children with steroid-refractory aGVHD. In November 2016, this trial was successful in a pre-specified interim futility analysis with topline results expected in 2017. Mesoblast plans to broaden the use of its therapy in adult patients with high-risk steroid-refractory aGVHD.

Mesoblast's licensee in Japan for aGVHD, JCR Pharmaceuticals Co. Ltd., has launched **TEMCELL®[1] HS Inj.** for treatment of children and adults with aGVHD. TEMCELL is the first allogeneic regenerative medicine to receive full approval in Japan.

MLC Technology Platform

Our proprietary MLCs are rare cells that are central to blood vessel maintenance, repair and regeneration, largely via the secretion of growth factors that act on neighbouring endothelial cells to promote blood vessel regeneration and function. They are found around blood vessels and respond to signals associated with tissue damage, secreting mediators that promote tissue repair and modulate immune responses.

Our 'off-the-shelf' MLC products are allogeneic, meaning cells from one donor may be used in many different recipients without the need for matching.

MLCs have two distinct technical properties:

- **Expansion** – we have developed proprietary methods that enable the large-scale expansion of our MLCs while maintaining their ability to produce key biomolecules associated with tissue health and repair. This allows us to produce a cellular product with consistent, well-defined therapeutic properties, batch release criteria and established potency assays, with accompanying manufacturing economies of scale.
- **Immune Privilege** – unlike other categories of stem cells or mature cell lineages, MLCs are well tolerated, meaning they do not initiate and facilitate an immune response when administered to unrelated patients. Based on extensive preclinical studies, the mechanisms that contribute to the lack of immune response are multi-factorial and involve lack of immune stimulatory molecule expression, as well as release of various biomolecules involved in the inhibition of immune responses.

MLCs can be taken from healthy young adult donors from various tissue sources, including bone marrow, fat tissue and dental pulp. The rare MLCs are isolated and expanded to create master cell banks, which are then further amplified to

1_TEMCELL® HS. Inj. is a registered trademark of JCR Pharmaceuticals Co., Ltd.

generate thousands of therapeutic doses for use in patients without the need for tissue matching. Each allogeneic product candidate is packaged into vials, frozen, and then transported to medical facilities for use in clinical trials worldwide.

Strategic Alliances

Mesoblast has established strategic relationships with several industry leaders to support clinical development, manufacturing and commercial capabilities.

JCR Pharmaceuticals Co. Ltd has been granted an exclusive right in Japan to Mesoblast's technology for use in conjunction with the treatment for hematologic malignancies using hematopoietic stem cell transplants derived from peripheral blood, cord blood or bone marrow.

An alliance with the Lonza Group was established to ensure long-term commercial manufacturing requirements of our products. We believe this alliance provides Mesoblast with significant commercial advantages, including capacity to meet long-term global supply of its proprietary product candidates, exclusive access to Lonza's cell therapy facilities in Singapore, and the potential for a purpose-built manufacturing facility to be built by Lonza to meet Mesoblast's long-term commercial objectives.

Robust Intellectual Property Position

Our intellectual property portfolio encompasses approximately 800 patents or patent applications across 69 patent families, which we believe provides substantial competitive advantages for the commercial development of our cell-based therapies in major markets including the United States, Europe, Japan and China. These cover compositions of matter and uses for our MLC-based technologies and other proprietary regenerative medicine product candidates and technologies, as well as for elements of our manufacturing processes.

World Class Stem Cell Science and Translational Medicine

Mesoblast's approach to product development is to ensure rigorous scientific investigations are performed with well-characterized cell populations in order to understand mechanisms of action for each potential indication. We use extensive preclinical translational studies to appropriately guide clinical trials that are structured to meet stringent criteria set by international regulatory agencies.

Experienced Management Team

Led by Chief Executive Professor Silviu Itescu, M.D., a pioneer of cellular medicines, the management team has substantial experience in all aspects of biopharmaceutical development with around 75 employees in the United States, Australia and Singapore.

Corporate

Mesoblast was publically listed on the Australian Securities Exchange (ASX:MSB) in December 2004. The Company has a Level 3 American Depositary Receipt program facility and listed on Nasdaq (Nasdaq: MESO) in November 2015.

Lonza's cell manufacturing facility in Singapore

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