

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 6-K

**Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934**

For the month of February 2018

Commission File Number 001-37626

Mesoblast Limited

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Australia

(Jurisdiction of incorporation or organization)

Silviu Itescu

Chief Executive Officer and Executive Director

Level 38

55 Collins Street

Melbourne 3000

Australia

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F:

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes No

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes No

On February 28, 2018, Mesoblast Limited filed with the Australian Securities Exchange a new release announcement and investor presentation, which are attached hereto as [Exhibit 99.1](#) and [Exhibit 99.2](#), and are incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly organized.

MESOBLAST LIMITED

/s/ Charlie Harrison

Charlie Harrison
Company Secretary

Dated: February 28, 2018

INDEX TO EXHIBITS

Item _____

- 99.1 Press release of Mesoblast Ltd, dated February 28, 2018.
- 99.2 Investor presentation of Mesoblast Ltd, dated February 28, 2018

**MESOBLAST OPERATIONAL HIGHLIGHTS AND FINANCIAL RESULTS
FOR THE HALF-YEAR ENDED DECEMBER 31, 2017**

Melbourne, Australia; February 28, 2018; and New York, USA, February 27, 2018: Mesoblast Limited (ASX: MSB; Nasdaq: MESO) today provided the market with an update on its operational highlights and consolidated financial results for the six months ended December 31, 2017 (the half-year of FY2018).

Revenues in the half-year of FY2018 were significantly increased to US\$14.6 million, compared with US\$0.9 million in the corresponding period in 2017, an increase of US\$13.7 million. Net cash outflows from operating activities for the half-year were reduced by US\$11.2 million (24%), compared with the half-year of FY2017. The Company recorded a profit after tax of US\$6.7 million, compared with a loss after tax of US\$39.8 million for the comparative period.

At December 31, 2017, the Company had cash reserves of US\$47.4 million. Mesoblast is in advanced discussions with certain potential strategic partners to strengthen its cash position to support ramp-up of its commercial activities.

Operational Highlights

This has been a landmark period for Mesoblast. The Company's first Phase 3 trial reported the successful achievement of its primary endpoint of Day 28 overall response for remestemcel-L (MSC-100-IV) in steroid-refractory acute Graft Versus Host Disease (aGVHD).

This cell therapy is now well positioned to be Mesoblast's first approved product in the United States.

Based on interactions with the United States Food and Drug Administration (FDA), Mesoblast believes that successful results from the completed Phase 3 trial through Day 100, together with Day 180 safety and quality of life parameters in these patients, may provide sufficient clinical evidence for filing for MSC-100-IV in the United States under an accelerated approval pathway.

In December 2017, Mesoblast received a Regenerative Medicine Advanced Therapy (RMAT) designation from the FDA for MPC-150-IM in end-stage heart failure patients with Left Ventricular Assist Devices (LVADs). The RMAT designation under the 21st Century Cures Act aims to expedite the development of regenerative medicine therapies intended for the treatment of serious diseases and life-threatening conditions. This trial completed enrollment in the reporting period and the 12 month data readout will occur in Q3 CY2018.

Enrollment in Mesoblast's Phase 3 trial evaluating its proprietary allogeneic mesenchymal precursor cell (MPC) product candidate MPC-06-ID for chronic low back pain is expected to complete imminently.

Full 52-week results in Mesoblast's Phase 2 trial of MPC-300-IV in biologic refractory rheumatoid arthritis showed an early and durable effect from a single infusion.

The strength of Mesoblast's intellectual property portfolio and its strategy to protect its commercial rights were highlighted with the license to TiGenix NV (TiGenix) of certain of our patents. This license supports the global commercialization of their adipose-derived mesenchymal stem cell product Cx601 for the local treatment of fistulae by Takeda Pharmaceutical Company Ltd. Mesoblast will receive up to €20 million (approximately US\$24 million) in payments, as well as single digit royalties on net sales of Cx601.

When consistent with its strategic objectives, Mesoblast may consider providing other third parties developing mesenchymal lineage cell products in areas outside of Mesoblast's core product focus with commercial access to its valuable patent portfolio.

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MSC-100-IV for Acute Graft Versus Host Disease (aGVHD):

The Company's GVHD strategy is to:

- leverage extensive clinical safety and efficacy data generated and published with MSC-100-IV in children with this life-threatening condition;
- take advantage of a potentially shortened FDA approval pathway due to the existing fast-track designation for MSC-100-IV;
- use a targeted product launch strategy; and
- seek label extension to adults with high-risk steroid refractory aGVHD (liver/gut disease) and product lifecycle management to include chronic GVHD.

The Phase 3 trial evaluating MSC-100-IV in children with aGVHD successfully met the primary endpoint of Day 28 overall response. The study results were presented at the 2018 tandem annual scientific meetings of the Center for International Blood & Marrow Transplant Research (CIBMTR) and the American Society of Blood and Marrow Transplantation (ASBMT).

In the 55 children enrolled in Mesoblast's open-label Phase 3 trial conducted across 32 sites in the United States, the Day 28 OR rate was 69%, a statistically significant increase compared to the protocol-defined historical control rate of 45% (p=0.0003).

Among patients who received at least one treatment infusion and were followed up for 100 days (n=50), the mortality rate was 22%. This is in contrast to Day 100 mortality rates as high as 70% in patients who fail to respond to initial steroid therapy.

The treatment regimen of MSC-100-IV was well tolerated and the incidence of adverse events was consistent with that expected from the underlying disease state and in line with previous use. These safety and efficacy results are consistent with Mesoblast's prior experience in 241 children treated under an expanded access protocol, where Day 28 OR correlated with Day 100 survival.

There are currently no products approved in the United States for treatment of steroid-refractory aGVHD. Given the serious nature of this condition, in 2017 the FDA granted Mesoblast Fast Track designation for the use of MSC-100-IV to achieve improved overall response rate in children with aGVHD.

Based on interactions with the FDA, Mesoblast believes that successful results from the completed Phase 3 trial through Day 100, together with Day 180 safety and quality of life parameters in these patients, may provide sufficient clinical evidence for filing for remestemcel-L in the United States under an accelerated approval pathway. The Phase 3 trial is being conducted under a FDA Investigational New Drug Application (NCT#02336230).

MPC-150-IM for Advanced and End-Stage Heart Failure (CHF):

The Company's CHF strategy is to:

- leverage data for potential near term market entry opportunity for MPC-150-IM in end-stage heart failure patients with LVADs, using the RMAT designation;
- use a targeted product launch strategy for use with LVADs;
- broaden market potential to Bridge to Recovery (BTR) market, representing a high-growth market opportunity for temporary LVAD use and possible explantation in end-stage, Class IV heart failure patients; and
- seek label extension through completion of Phase 3 program in Class III heart failure patients

MPC-150-IM is in late-stage clinical development for advanced heart failure (Class III). This Phase 3 trial continues to recruit across multiple sites in North America, with completion of enrollment expected to occur in 2018.

During this reporting period, the FDA granted RMAT designation for the Company's MPC therapy in the treatment of heart failure patients with left ventricular systolic dysfunction and LVADs. The RMAT designation under the 21st Century Cures Act aims to expedite the development of regenerative medicine therapies intended for the treatment of serious diseases and life-threatening conditions.

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This RMAT designation allows for multi-disciplinary, comprehensive interactions with the FDA to support the efficient development of and potential accelerated approval pathway for Mesoblast's allogeneic MPCs in the treatment of heart failure patients with LVADs. The RMAT designation also offers eligibility for priority review. Once the biologics license application (BLA) for a product is approved, the FDA can require various post-approval confirmatory commitments.

The basis of this RMAT designation grant came from the completed study data set of a 30-patient randomized, blinded, placebo-controlled pilot trial of Mesoblast's MPCs at a dose of 25 million cells in heart failure patients with LVADs, and related analyses.

These preliminary clinical data suggest that Mesoblast's MPC product improved native heart function, prolonged the time post LVAD implantation of a first hospitalization for a non-surgical major gastrointestinal (GI) bleeding event, and improved early survival rates in these LVAD recipients. The results of the pilot study were published in the American Heart Association Journal Circulation.

The Phase 2b trial of MPCs at a dose of 150 million cells in 159 patients with heart failure and LVADs completed enrollment during the reporting period. This trial is being funded by the United States National Institutes of Health and the Canadian Institute of Health Research.

MPC-06-ID for Chronic Low Back Pain (CLBP):

Mesoblast's Phase 3 trial in patients with CLBP who have failed conservative measures is on track to complete enrollment in Q1 CY18.

If the Phase 2 results, which showed durable improvement in pain and function from a single intra-discal injection are confirmed in the Phase 3 trial, the Company believes that MPC-06-ID may be evaluable as a potential non-opioid, non-surgical alternative for patients suffering from CLBP who have failed conservative measures.

MPC-300-IV for Systemic, Immune-mediated Diseases:

MPC-300-IV responds to inflammatory signals with release of counter-inflammatory factors and has the potential as shown in preclinical studies to treat multiple immune-mediated diseases, including biologic-refractory rheumatoid arthritis.

MPC-300-IV has generated positive clinical data across three randomized, placebo-controlled Phase 2 trials in disease states associated with inflammation; type 2 diabetes with inadequate glucose control, diabetic kidney disease, and biologic-refractory rheumatoid arthritis (RA).

During the reporting period, results from a 48-patient randomized, placebo-controlled Phase 2 trial in patients with biologic refractory RA over 52 weeks were presented at the 2017 American College of Rheumatology Annual Meeting in San Diego, CA. The primary objective of the study was to evaluate safety and tolerability of a single intravenous infusion in biologic refractory RA patients through a 12-week primary endpoint. Additional objectives were to evaluate clinical efficacy at the 12-week endpoint and to assess the durability of effects and safety profile over the full 52-week study.

The results showed an early and durable effect from a single infusion of MPC-300-IV in biologic-refractory RA patients. Specifically:

- Infusions were well-tolerated with no treatment-related serious adverse events reported during the 52-week period, and a safety profile over 52 weeks comparable among the placebo and two MPC treatment groups.
- A single intravenous MPC infusion in biologic refractory RA patients resulted in dose-related improvements in clinical symptoms, function, disease activity and patient-reported outcomes. Efficacy signals were observed for each of ACR 20/50/70, ACR-N, HAQ-DI, SF-36 and DAS-28 disease activity score.
- The 2 million MPC/kg dose showed the greatest overall treatment responses. Onset of treatment responses occurred as early as 4 weeks, peaked at 12 weeks, were maintained through 39 weeks, and waned by 52 weeks.
- Greatest benefits over 52 weeks were seen in patients who had failed less than three biologics (1-2 biologic sub-group) prior to MPC treatment, identifying this as a potentially optimal target population.

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The results of this Phase 2 trial identified a dose-related treatment effect, the earliest onset of the effect, and a level of durability from a single dose. Given the safety profile, the Company intends to evaluate whether higher MPC doses can achieve even greater rates of low disease activity or remission within the first 12 weeks and beyond. The Company also plans to evaluate whether the observed durable treatment responses can be maintained for the longer term using repeat dose therapy.

Upcoming Milestones

The Company expects multiple key inflection points over the remainder of 2018, including:

- Remestemcel-L (MSC-100-IV) for Pediatric Steroid-refractory Acute Graft Versus Host Disease
 - Day 100 survival data (Q2 CY18)
 - Day 180 safety data (Q3 CY18)
- MPC-06-ID for Chronic Low Back Pain
 - Phase 3 trial expected to complete enrollment imminently (Q1 CY18)
- MPC-150-IM for Advanced and End-Stage Heart Failure
 - Phase 2B trial for Class IV; 12 month data read-out (Q3 CY18)
 - Phase 3 trial for Class II/III; targeted enrollment completion (H2 CY18).

Financial Highlights

At December 31, 2017, the Company had cash reserves of US\$47.4 million. Revenues in the half-year of FY2018 were significantly increased to US\$14.6 million, compared with US\$0.9 million in the corresponding period in 2017, an increase of US\$13.7 million. Revenues for the period included US\$11.8 million in connection with the Company's patent license agreement with TiGenix which was signed in the reporting period (including the upfront receipt of US\$5.9 million upon execution of our patent license agreement as well as a further US\$5.9 million recognized in the period but due within 12 months), and milestone and royalties of US\$2.6 million in connection with sales of TEMCELL HS. Inj.1 by our licensee in Japan, JCR Pharmaceuticals Co., Ltd (JCR).

Net cash outflows from operating activities for the half-year were reduced by US\$11.2m (24%), compared with the half-year of FY2017, primarily as a result of a reduction of US\$4.7 million in payments to suppliers and employees and increased inflows of US\$6.5 million relating to the receipts from TiGenix and JCR.

The Company recorded a profit after tax of US\$6.7 million, compared with a loss after tax of US\$39.8 million for the comparative period.

A non-cash income tax benefit of US\$26.2 million was recognized in the half-year FY2018 as a result of changes in tax rates. On December 22, 2017, the United States signed into law the Tax Cuts and Jobs Act (the Tax Act), which changed many aspects of U.S. corporate income taxation, including a reduction in the corporate income tax rate from 35% to 21%.

Mesoblast retains an equity facility for up to A\$120 million/US\$90 million, to be used at its discretion over the next 18 months to provide additional funds as required.

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

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Financial Results for the Six Months Ended December 31, 2017 (the half-year) (in U.S. Dollars)

Revenues were US\$14.6 million in the half-year of FY2018 compared with US\$0.9 million in the half-year of FY2017, an increase of US\$13.7 million.

In addition to increasing revenues, the Company contained spend whilst increasing its R&D investment in Tier 1 clinical programs by deferring manufacturing production and constraining management and administration costs. Research and development expenses increased by US\$2.6 million (9%) and management and administration costs increased by US\$0.3 million (3%), these increases were offset by cost savings of US\$5.4 million (76%) for manufacturing for the half-year of FY2018, compared with the half-year of FY2017.

There was a decrease of US\$26.5 million (58%) in the loss before income tax for the half-year of FY2018, compared with the half-year of FY2017.

The main items which impacted the loss before income tax movement were:

- **Revenues:** the Company recognized milestone revenue of US\$12.8 million in the half-year of FY2018 compared to US\$Nil in the half-year of FY2017, an increase of US\$12.8 million. Milestone revenue of US\$12.8 million in the half-year of FY2018 comprised: US\$5.9 million (€5.0 million) upfront payments received upon execution of the Company's patent license agreement with TiGenix; a further US\$5.9 million (€5.0 million) of milestone revenue was recognized in relation to product Cx601 under the terms of the TiGenix patent license agreement; and US\$1.0 million in sales milestones on achievement of cumulative sales milestones on TEMCELL by our licensee in Japan, JCR.

The Company recognized commercialization revenues from royalties on sales of TEMCELL by JCR of US\$1.6 million in the half-year of FY2018 compared with US\$0.7 million in the half-year of FY2017, an increase of US\$0.9 million (139%).

- **Research and Development** expenses were US\$31.6 million for the half-year of FY2018, compared with US\$29.0 million for the half-year of FY2017, an increase of US\$2.6 million (9%) as the Company invested in Tier 1 clinical programs.
- **Manufacturing** expenses were US\$1.7 million for the half-year of FY2018, compared with US\$7.1 million for the half-year of FY2017, a decrease of US\$5.4 million (76%) due to a reduction in manufacturing activity because sufficient quantities of clinical grade product were previously manufactured for all ongoing clinical trials.
- **Management and Administration** expenses were US\$10.6 million for the half-year FY2018, compared with US\$10.3 million for the half-year of FY2017, an increase of US\$0.3 million (3%) due to increased labour costs for non-cash share based payments partially offset by a decrease in corporate overhead expenses such as rent, IT costs and professional service fees.

The overall decrease in loss before income tax also includes movements in other items which did not impact current cash reserves, such as: fair value remeasurement of contingent consideration, and foreign exchange movements within other operating income and expenses.

A non-cash income tax benefit of US\$26.2 million and was recognized in the half-year FY2018 in relation to the net change in deferred tax assets and liabilities recognized on the balance sheet during the period, primarily due to a revaluation of our deferred tax assets and liabilities recognized as a result of changes in tax rates. On December 22, 2017, the United States signed into law the Tax Cuts and Jobs Act (the Tax Act), which changed many aspects of United States corporate income taxation, including a reduction in the corporate income tax rate from 35% to 21%. The Company recognized the tax effects of the Tax Act in the half-year FY2018, the most significant of which was a tax benefit resulting from the remeasurement of deferred tax balances to 21%.

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A non-cash income tax benefit of US\$6.2 million was recognized in the half-year FY2017 in relation to the net change in deferred tax assets and liabilities recognized on the balance sheet during the period.

The net profit attributable to ordinary shareholders was US\$6.7 million, or 1.46 cents earnings per share, for the half-year of FY2018, compared with a net loss of US\$39.8 million, or 10.41 cents loss per share, for the half-year of FY2017.

Financial Results for the Three Months Ended December 31, 2017 (second quarter) (in U.S. Dollars)

Revenues were US\$13.4 million in the second quarter of FY2018 compared with US\$0.6 million in the second quarter of FY2017, an increase of US\$12.8 million.

In addition to increasing revenues the Company contained spend whilst increasing its R&D investment in Tier 1 clinical programs by deferring manufacturing production and constraining management and administration costs. Research and development expenses increased by US\$1.2 million (8%) and management and administration costs increased by US\$0.7 million (16%), these increases were offset by cost savings of US\$3.0 million (79%) for manufacturing for the second quarter of FY2018, compared with the second quarter of FY2017.

There was a decrease of US\$13.5 million (58%) in the loss before income tax for the second quarter of FY2018, compared with the second quarter of FY2017.

The main items which impacted the loss before income tax movement were:

- **Revenues:** the Company recognized milestone revenue of US\$12.3 million in the second quarter of FY2018 compared to US\$Nil in the second quarter of FY2017, an increase of US\$12.3 million. Milestone revenue of US\$12.3 million in the second quarter of FY2018 comprised: US\$5.9 million (€5.0 million) upfront payments received upon execution of the Company's patent license agreement with TiGenix; a further US\$5.9 million (€5.0 million) of milestone revenue was recognized in relation to product Cx601 under the terms of the TiGenix patent license agreement; and US\$0.5 million in sales milestones on achievement of cumulative sales milestones on TEMCELL by our licensee in Japan.

The Company recognized commercialization revenues from royalties on sales of TEMCELL by our licensee in Japan, JCR, of US\$0.9 million in the second quarter of FY2018 compared with US\$0.4 million in the second quarter of FY2017, an increase of US\$0.5 million (119%).

- **Research and Development** expenses were US\$16.2 million for the second quarter of FY2018, compared with US\$15.0 million for the second quarter of FY2017, an increase of US\$1.2 million (8%) as the Company invested in Tier 1 clinical programs.
- **Manufacturing** expenses were US\$0.8 million for the second quarter of FY2018, compared with US\$3.8 million for the second quarter of FY2017, a decrease of US\$3.0 million (79%) due to a reduction in manufacturing activity because sufficient quantities of clinical grade product were previously manufactured for all ongoing clinical trials.
- **Management and Administration** expenses were US\$5.6 million for the second quarter FY2018, compared with US\$4.9 million for the second quarter of FY2017, an increase of US\$0.7 million (16%) due to increased labour costs for non-cash share based payments partially offset by a decrease in corporate overhead expenses such as rent, IT costs and professional service fees.

The overall decrease in loss before income tax also includes movements in other items which did not impact current cash reserves, such as: fair value remeasurement of contingent consideration, and foreign exchange movements within other operating income and expenses.

A non-cash income tax benefit of US\$23.3 million and was recognized in the second quarter FY2018 in relation to the net change in deferred tax assets and liabilities recognized on the balance sheet during the period, primarily

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due to a revaluation of our deferred tax assets and liabilities recognized as a result of changes in tax rates. On December 22, 2017, the United States signed into law the Tax Cuts and Jobs Act (the Tax Act), which changed many aspects of U.S. corporate income taxation, including a reduction in the corporate income tax rate from 35% to 21%. The Company recognized the tax effects of the Tax Act in the second quarter FY2018, the most significant of which was a tax benefit resulting from the remeasurement of deferred tax balances to 21%.

A non-cash income tax benefit of US\$3.1 million was recognized in the second quarter FY2017 in relation to the net change in deferred tax assets and liabilities recognized on the balance sheet during the period.

The net profit attributable to ordinary shareholders was US\$13.7 million, or 2.91 cents earnings per share, for the second quarter of FY2018, compared with a net loss of US\$20.1 million, or 5.22 cents loss per share, for the second quarter of FY2017.

Conference Call Details

There will be a webcast on the financial results for the first half ended December 31, 2017 beginning at 4:30 pm EST on Tuesday, February 27, 2018; 8:30 am Wednesday, February 28, 2018 AEDT.

The live webcast, including a slide presentation, can be accessed via <http://webcasting.brrmedia.com/broadcast/5a6ffa22271b41638bdc2f22>

To access the call only, dial 1 855 881 1339 (U.S.), 1 800 558 698 (toll-free Australia) or +61 2 9007 3187 (outside of the U.S. and Australia). The conference identification code is 882151.

The archived webcast will be available on the Investor page of the Company's website – www.mesoblast.com

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, 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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Consolidated Income Statement

(in U.S. dollars, in thousands, except per share amount)	Three Months Ended December 31,		Six Months Ended December 31,	
	2017	2016	2017	2016
Revenue	13,397	550	14,571	945
Research & development	(16,222)	(15,043)	(31,590)	(29,047)
Manufacturing commercialization	(801)	(3,790)	(1,678)	(7,085)
Management and administration	(5,643)	(4,879)	(10,655)	(10,338)
Fair value remeasurement of contingent consideration	(793)	(326)	8,702	(1,339)
Other operating income and expenses	423	311	1,091	784
Loss before income tax	(9,639)	(23,177)	(19,559)	(46,080)
Income tax benefit/(expense)	23,342	3,126	26,240	6,231
Profit/(loss) attributable to the owners of Mesoblast Limited	13,703	(20,051)	6,681	(39,849)
Earnings/(losses) per share from continuing operations attributable to the ordinary equity holders of the Group:	Cents	Cents	Cents	Cents
Basic - earnings/(losses) per share	2.91	(5.22)	1.46	(10.41)
Diluted - earnings/(losses) per share	2.91	(5.22)	1.46	(10.41)

Consolidated Statement of Comprehensive Income

(in U.S. dollars, in thousands)	Three Months Ended December 31,		Six Months Ended December 31,	
	2017	2016	2017	2016
Profit/(loss) for the year	13,703	(20,051)	6,681	(39,849)
Other comprehensive (loss)/income				
<i>Items that may be reclassified to profit and loss</i>				
Changes in the fair value of available-for-sale financial assets	47	(1)	67	31
Exchange differences on translation of foreign operations	(385)	(1,277)	(500)	(574)
Other comprehensive (loss)/income for the period, net of tax	(338)	(1,278)	(433)	(543)
Total comprehensive income/(losses) attributable to the owners of Mesoblast Limited	13,365	(21,329)	6,248	(40,392)

Mesoblast Limited
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www.mesoblast.com

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Consolidated Statement of Balance Sheet

(in U.S. dollars, in thousands)	As of December 31, 2017	As of June 30, 2017
Assets		
Current Assets		
Cash & cash equivalents	47,386	45,761
Trade & other receivables	12,236	3,743
Prepayments	12,650	14,105
Total Current Assets	72,272	63,609
Non-Current Assets		
Property, plant and equipment	1,453	1,814
Available-for-sale financial assets	2,065	1,997
Other non-current assets	3,399	1,916
Intangible assets	585,622	586,350
Total Non-Current Assets	592,539	592,077
Total Assets	664,811	655,686
Liabilities		
Current Liabilities		
Trade and other payables	18,121	21,805
Provisions	3,470	14,865
Total Current Liabilities	21,591	36,670
Non-Current Liabilities		
Deferred tax liability	23,912	49,293
Provisions	43,703	52,957
Total Non-Current Liabilities	67,615	102,250
Total Liabilities	89,206	138,920
Net Assets	575,605	516,766
Equity		
Issued Capital	878,989	830,425
Reserves	34,837	31,243
(Accumulated losses)/retained earnings	(338,221)	(344,902)
Total Equity	575,605	516,766

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Consolidated Statement of Cash Flows

(in U.S. dollars, in thousands)	Six months ended December 31,	
	2017	2016
Cash flows from operating activities		
Commercialization revenue received	1,080	579
Milestone payment received	6,125	—
Payments to suppliers and employees (inclusive of goods and services tax)	(42,593)	(47,252)
Interest received	192	309
Income taxes (paid)/refunded	(25)	—
Net cash (outflows) in operating activities	(35,221)	(46,364)
Cash flows from investing activities		
Payments for contingent consideration	(543)	—
Investment in fixed assets	(137)	(292)
Net cash (outflows) in investing activities	(680)	(292)
Cash flows from financing activities		
Proceeds from issue of shares	40,532	—
Payments for share issue costs	(2,603)	(60)
Net cash inflows/(outflows) by financing activities	37,929	(60)
Net increase/(decrease) in cash and cash equivalents	2,028	(46,716)
Cash and cash equivalents at beginning of period	45,761	80,937
FX (losses)/gains on the translation of foreign bank accounts	(403)	(319)
Cash and cash equivalents at end of period	47,386	33,902

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Operational Highlights and Financial Results for the Half Year Ended December 31, 2017

February 2018

Nasdaq: MESO ASX: MSB

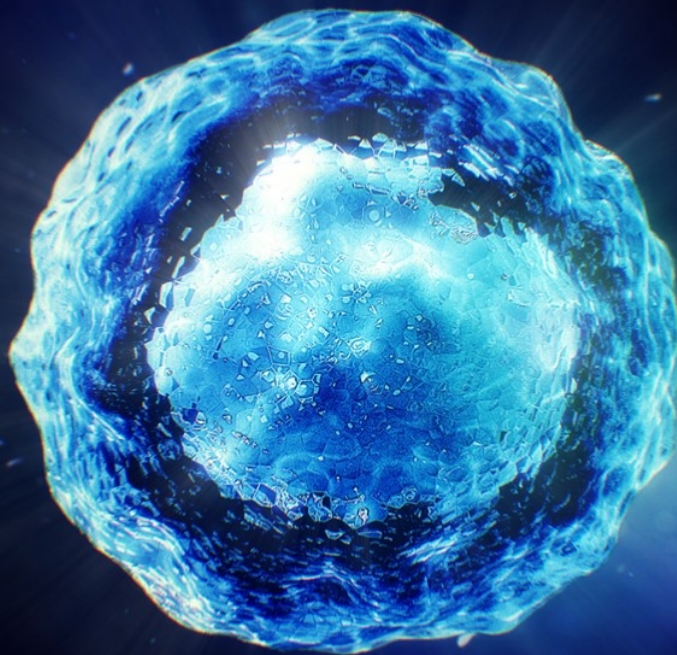


CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This presentation 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. All statements other than statements of historical facts contained in this presentation are forward-looking statements. Words such as, but not limited to, "believe," "expect," "anticipate," "estimate," "intend," "plan," "targets," "likely," "will," "would," "could," and similar expressions or phrases identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and future events, recent changes in regulatory laws, and financial trends that we believe may affect our financial condition, results of operation, business strategy and financial needs. These statements may relate to, but are not limited to: expectations regarding the safety or efficacy of, or potential applications for, Mesoblast's adult stem cell technologies; expectations regarding the strength of Mesoblast's intellectual property, the timeline for Mesoblast's regulatory approval process, and the scalability and efficiency of manufacturing processes; expectations about Mesoblast's ability to grow its business and statements regarding its relationships with current and potential future business partners and future benefits of those relationships; statements concerning Mesoblast's share price or potential market capitalization; and statements concerning Mesoblast's capital requirements and ability to raise future capital, among others. 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. You should read this presentation together with our financial statements and the notes related thereto, as well as the 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, include, without limitation: risks inherent in the development and commercialization of potential products; uncertainty of clinical trial results or regulatory approvals or clearances; government regulation; the need for future capital; dependence upon collaborators; and protection of our intellectual property rights, among others. 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.

Our Mission:

Mesoblast is committed to bring to market disruptive cellular medicines to treat serious and life-threatening illnesses



Investment Proposition:

Building a Leading Franchise of Cellular Medicines



- Disruptive Cellular Technology Platform
- Commercial Translation Capabilities
- Advanced Pipeline of Cellular Medicines
- Targeting Serious or Life-Threatening Conditions with Unmet Needs

Disruptive Cellular Medicine Platform¹⁻⁴

- Mesenchymal Lineage Cells (MLCs) have unique receptors that respond to activating inflammatory and damaged-tissue signals
- In response to these signals, MLCs secrete a diverse variety of biomolecules responsible for immunomodulation and tissue repair
- The multi-modal mechanisms of action target multiple pathways
- STRO-1⁺ Mesenchymal Precursor Cells (MPCs) are at the apex of the MLC hierarchy and their immuno-selection provides a homogeneous population of potent cells

1. Simmons PJ and Torok-Storb, B. Identification of stromal cell precursors in bone marrow by a novel monoclonal antibody, STRO-1. *Blood*. 1991;78:55-62.
2. Gronthos S, Zannettino AC, Hay SJ, et al. Molecular and cellular characterisation of highly purified stromal stem cells derived from human bone marrow. *J Cell Sci*. 2003;116(Pt 9):1827-35.
3. See F, Seki T, Psaltis PJ, et al. Therapeutic effects of human STRO-3-selected mesenchymal precursor cells and their soluble factors in experimental myocardial ischemia. *J Cell Mol Med*. 2011;15:2117-29.
4. Psaltis PJ, Paton S, See F, et al. Enrichment for STRO-1 expression enhances the cardiovascular paracrine activity of human bone marrow-derived mesenchymal cell populations. *J Cell Physiol*. 2010;223(2):530-40.



Commercial Translation Capabilities:

Technology Positioned for Scalable, Industrialized Manufacturing

- Immune privileged nature of MLCs enables allogeneic “off the shelf” product candidates
- Culture expansion scalable to produce commercial quantities of potent and reproducible therapeutic doses
- Specific formulations defined for product delineation
- Management know how in regulatory activities necessary for product approval and commercial launch
- MSC-100-IV (remestemcel-L) positioned to be first allogeneic MLC product launched in the USA



Lonza contract manufacturing facility in Singapore

Portfolio of Advanced Product Candidates:

Three Tier 1 Product Candidates in Phase 3



							Commercialization	
	Platform	Product Candidate	Therapeutic Area	Pre-Clinical/ Pre-IND	Phase 2	Phase 3	Approval	Partnering ¹
Tier 1	MPC	MPC-150-IM	Advanced (Class 3) HF End Stage (Class 4) HF ¹	[Progress bars: Pre-Clinical/Pre-IND, Phase 2, Phase 3]			Japan	mesoblast <small>the regenerative medicine company</small>
	MPC	MPC-06-ID	Chronic Low Back Pain	[Progress bars: Pre-Clinical/Pre-IND, Phase 2, Phase 3]				mesoblast <small>the regenerative medicine company</small>
	MPC	MPC-300-IV	RA DN/Type 2 Diabetes	[Progress bars: Pre-Clinical/Pre-IND, Phase 2, Phase 3]				mesoblast <small>the regenerative medicine company</small>
	MSC	TEMCELL® HS Inj MSC-100-IV	Acute GVHD Acute GVHD	[Progress bars: Pre-Clinical/Pre-IND, Phase 2, Phase 3]				JCR mesoblast <small>the regenerative medicine company</small>
Tier 2	Includes MSC-100-IV (Crohn's disease – biologic refractory), MPC-25-IC (Acute Cardiac Ischemia), MPC-25-Osteo (Spinal Fusion) and MPC-75-IA (Knee Osteoarthritis)							

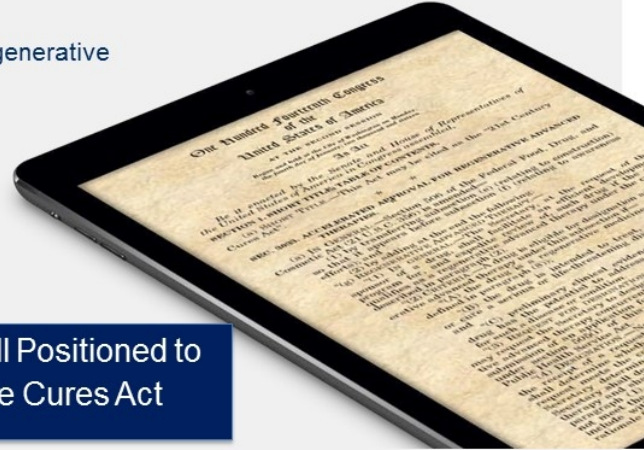
This chart is figurative and does not purport to show individual trial progress within a clinical program. For product registration purposes, Phase 3 programs may require more than one trial. Tier 1 programs represent our lead programs where we focus the majority of our time and resources. Tier 2 programs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

1. Clinical trial is funded by the U.S. National Institutes of Health and the Canadian Health Research Institute.

The 21st Century Cures Act (“Cures Act”):

Legislation for An Expedited Approval Path for Cellular Medicines Designated as Regenerative Medicine Advanced Therapies (RMAT)

- Cellular medicines may be designated as regenerative advanced therapies, if they are intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition, and there is preliminary clinical evidence indicating the potential to address the unmet medical need
- Key benefits of the legislation for cell-based medicines, designated as regenerative advanced therapies, include:
 - Potential eligibility for priority review and accelerated approval
 - Potential to utilize surrogate endpoints for accelerated approval
 - Potential to utilize a patient registry data and other sources of “real world evidence” for post approval studies, subject to approval by the FDA



Our Portfolio of Advanced Product Candidates is Well Positioned to Access Accelerated Approvals Pathways Under the Cures Act

Mesoblast Received FDA RMAT Designation For MPC-150-IM for Heart Failure Patients With Left Ventricular Assist Devices (LVADs)

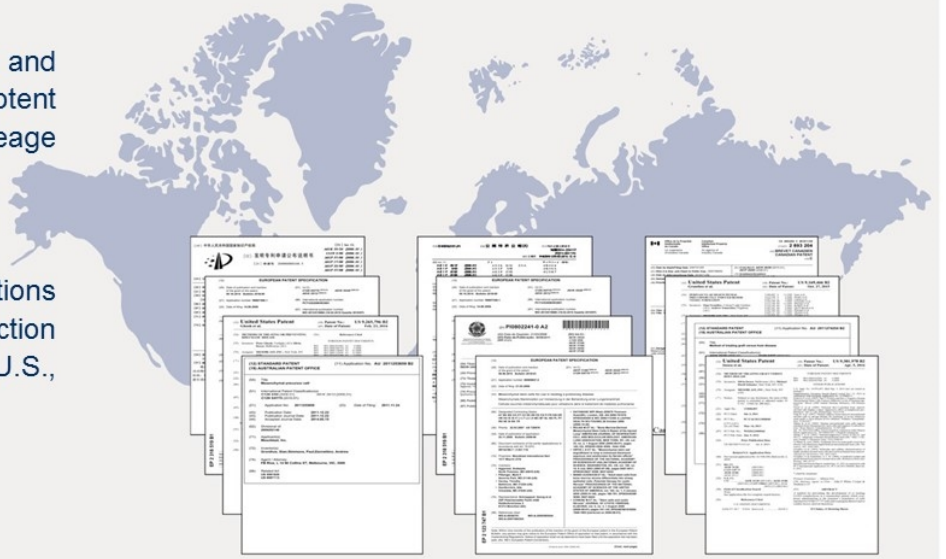


- RMAT designation grant was based on the completed study data set and related analyses of a 30-patient randomized, blinded, placebo controlled trial in end-stage heart failure patients with LVADs which suggested:
 - Improved native heart function
 - Prolonged the time post LVAD implantation of a first hospitalization for a non-surgical GI bleeding event
 - Improved early survival rates
- 159 patient trial in end-stage heart failure with LVADs has completed enrollment with 12 month data readout Q3 CY 2018
- Mesoblast intends to meet as soon as possible with the FDA regarding the company's development strategy. Key benefits of the designation as regenerative advanced therapies, could include:
 - Potential eligibility for priority review and accelerated approval
 - Potential to utilize surrogate endpoints for accelerated approval
 - Potential to utilize a patient registry data and other sources of "real world evidence" for post approval studies, subject to approval by the FDA

Intellectual Property:

An Extensive Portfolio Covering Mesenchymal Lineage Precursors and Progeny

- Composition of Matter, Manufacturing, and Therapeutic Applications of Potent Immuno-selected mesenchymal lineage precursor and stem cells
- 800 Patents and patent applications across 69 Patent Families. Protection across major markets including the U.S., Europe, Japan and China




Mesoblast Concluded Patent Settlement and License Agreement With TiGenix

- Mesoblast granted TiGenix exclusive access to certain of its patents to support global commercialization of the adipose-derived mesenchymal stem cell (MSC) product Cx601 limited to the local treatment of fistulae, including in Crohn's disease
- Mesoblast continues to develop its proprietary bone marrow-derived allogeneic expanded MSC product candidate for intravenous delivery to induce remission in patients with biologic-refractory Crohn's disease
- Mesoblast will receive up to €20 million in payments (approx. US\$24 million), with €5 million upfront, €5 million within 12 months and up to €10 million in product regulatory milestones
- Mesoblast will additionally receive single digit royalties on global net sales of Cx601 for fistulae
- Subsequent to the patent settlement and license agreement, Takeda Pharmaceutical Co Ltd announced its intention to build upon its prior exclusive ex-USA license for Cx601 from TiGenix by acquiring TiGenix for approximately €520 million



Diverse Pipeline of Cellular Medicines





Acute Graft vs Host Disease
Remestemcel-L (MSC-100-IV) for
Steroid-Refractory aGVHD

Remestemcel-L (MSC-100-IV): Market Opportunity for aGVHD

Burden of Illness

- Steroid-refractory aGVHD patients have mortality rates as high as 95%¹
- Refractory aGVHD is associated with significant extended hospital stay costs²
- aGVHD - a severe immunological reaction occurring in BMT patients
- Is a major limitation in successful allogeneic hematopoietic stem cell transplants¹

Minimal Treatment Options

- No regulatory approved treatment for SR-aGVHD outside of Japan
- No broad consensus on off-label second-line agents

Targeting Unmet Need

- Pediatrics: first-line steroid refractory
- Adults: first-line steroid refractory in high-risk (liver/gut disease) patients

Market Opportunity

- ~30,000 allogeneic BMTs performed globally (~20K US/EU5) annually, ~20% pediatric^{4,5}
- Our licensee JCR Pharmaceuticals Co., Ltd received full approval in Japan (TEMCELL® HS Inj.) for aGVHD in 2015; reimbursed up to ~\$USD 195k³



1. Westin, J., Saliba, RM., Lima, M. (2011) Steroid-refractory acute GVHD: predictors and outcomes. *Advances in Hematology*.
2. Anthem-HealthCore/Mesoblast claims analysis (2016).
3. Based on a ¥JPY = \$USD 0.009375 spot exchange rate on as of the market close on November 11, 2016. Amounts are rounded. Source: Bloomberg.
4. Gratwohl A et al Quantitative and qualitative differences in use and trends of hematopoietic stem cell transplantation: a Global Observational Study. *Haematologica*. 2013 Aug;98(8):1282-90.
5. CIBMTR, Decision resources GVHD Epi Nov 2012.



1. Target **pediatric** patients with SR-aGVHD first

- Extensive safety and efficacy data generated and published in children with SR-aGVHD¹
- High economic burden in treatment of children with SR-aGVHD
- Fast-track designation provides pathway for priority review and rolling review process
- Submit single, open-label Phase 3 trial seeking accelerated approval

2. Seek label extension for high-risk **adult** patients with SR-aGVHD

- This adult subset has the highest mortality and greatest resistance to other treatment agents
- High economic burden in treating this population subset
- Remestemcel-L has shown efficacy signals in subgroup analyses of this population

3. Lifecycle potential in **chronic** GVHD (cGVHD)

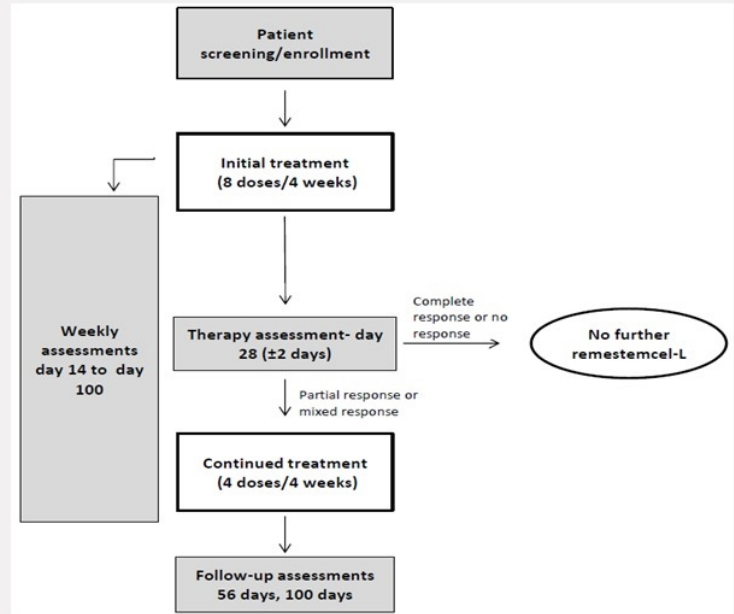
- Chronic GVHD represents a distinct GVHD patient population
- Proof of concept data already published for MSC in cGVHD²

1. Allogeneic Human Mesenchymal Stem Cell Therapy (Remestemcel-L) as a Rescue Agent for Severe Refractory Acute Graft-versus-Host Disease in Pediatric Patients - Biology of Blood and Marrow Transplantation Journal, August 2013. 2. Khandelwal P, Teusink-Cross A, Davies S (2017) Ruxolitinib as Salvage Therapy in Steroid-Refractory Acute Graft-versus-Host Disease in Pediatric Hematopoietic Stem Cell Transplant Patients. Biol Blood Marrow Transplant 23: 1122-1127

2. Weng JY, Du X, Geng SX, Peng YW, Wang Z, Lu ZS et al. Mesenchymal stem cell as salvage treatment for refractory chronic GVHD. Bone Marrow Transplant 45: 1732-1740 (2010)

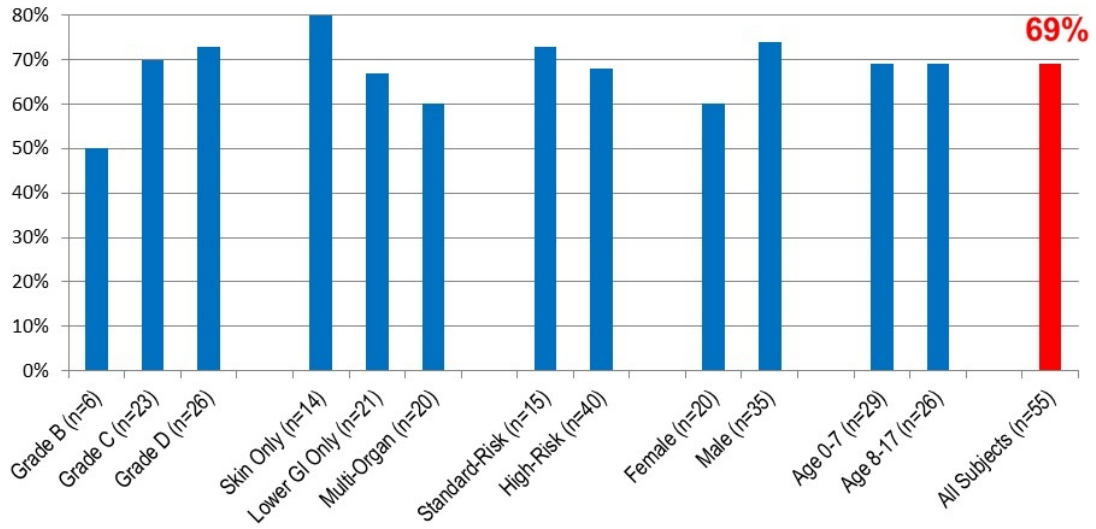
Remestemcel-L (MSC-100-IV): Phase 3 Pediatric Trial GVHD001 Completed Enrollment as First-line Therapy in aGVHD After Failing Steroids

- Multi-center, Single-Arm, Open-Label to evaluate efficacy and safety to day 100 (GVHD001) and from day 100 to day 180 (GVHD002)
- 55 pediatric patients (2 months to 17 years)
- aGVHD following allogeneic HSCT failing systemic corticosteroid therapy
- Grade B aGVHD involving liver and/or GI tract with or without concomitant skin disease
- Grades C and D aGVHD involving skin, liver and/or GI tract
- Primary endpoint: **Overall response at Day 28**
- Key secondary endpoint: Survival at Day 100
- Interim futility analysis of primary endpoint successful November 2016



Protocol GVHD001: Primary Efficacy Outcome

Overall Response at Day 28 was 69%, p=0.0003



- 69% Overall Response rate at Day 28 (29% CR + 40% PR)
- p-value calculated from the binomial distribution, under the assumption of a 0.45 success rate under the null hypothesis



- Remestemcel-L (MSC-100-IV) infusions were well tolerated
- The incidence of adverse events in the trial was consistent with that expected from the underlying disease state and in line with previous use of remestemcel-L (MSC-100-IV)
- Eleven subjects have died during the study (22% mortality through Day 100)
 - None of the deaths was reported to be related to remestemcel-L (MSC-100-IV) by the investigators
 - The underlying causes of death included HSCT-related causes in 9 subjects (8 due to infections and 1 due to GHVD progression), and primary cancer relapse in 2 subjects
- Four subjects have terminated participation in the study early (prior to Day 100)
 - 1 subject was not able to be dosed; 1 subject had a non-fatal AE (somnolence); 1 subject had parental consent withdrawn; and 1 subject was withdrawn by PI

Protocol GVHD001: Summary and Conclusions



- This Phase 3 study evaluated allogeneic mesenchymal stem cells (MSCs), remestemcel-L (MSC-100-IV), for the treatment of steroid-refractory acute graft-versus-host disease intended to improve overall response rate in pediatric subjects
- Study successfully met the primary endpoint of improved Day 28 Overall Response in steroid-refractory pediatric subjects with severe disease
 - Day 28 OR was 69%
 - Day 28 OR was significantly improved ($p=0.0003$) compared to protocol-defined historical control rate of 45%
- Remestemcel-L (MSC-100-IV) was safe and the infusions were well tolerated. The incidence of adverse events in the trial was consistent with that expected from the underlying disease state and in line with previous use of remestemcel-L (MSC-100-IV)¹
- Among patients who received at least one treatment infusion and were followed up for 100 days ($n=50$), the mortality rate was 22%, an encouraging indicator of potential longer term benefit
- These findings are consistent with the overall response, safety, and survival in the previous report of remestemcel-L (MSC-100-IV) in a 241 subject expanded access protocol of pediatric subjects with SR-aGVHD who failed to respond to steroids as well as to multiple additional treatments²

1. Data on file from Protocol 280 Clinical Study Reports.

2. Kurtzberg J. et al. Effect of Human Mesenchymal Stem Cells (Remestemcel-L) on Clinical Response and Survival Confirmed in a Large Cohort of Pediatric Patients with Severe High-Risk Steroid-Refractory Acute Graft Versus Host Disease. BBMT. 2016; 22.

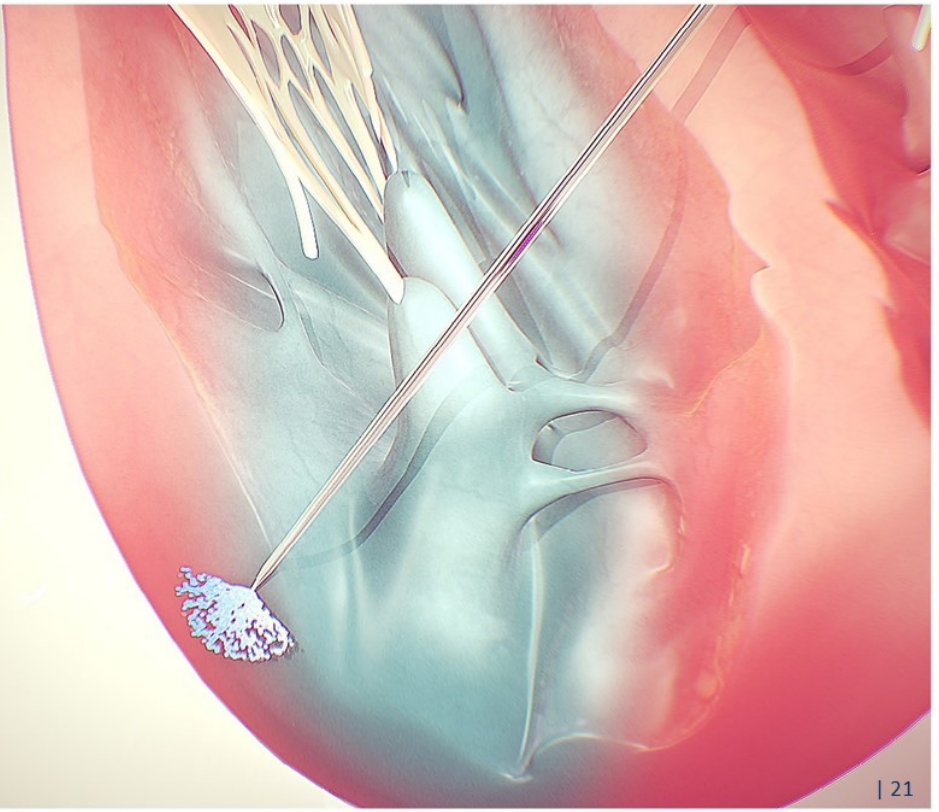
Remestemcel-L (MSC-100-IV): Commercialization Plans



- Clinical
 - Successful primary endpoint at Day 28 - Completed
 - Day 100 survival (Q2 CY2018)
 - Day 180 safety and survival (Q3 CY2018)
- Manufacturing
 - Commercial Readiness
- Market preparation
 - Pricing and reimbursement
 - Medical Education plan
- Regulatory
 - North America
 - USA: Pre-BLA meeting - request for rolling submission under approved Fast Track designation
 - FDA submission
 - Canada : registration of Singapore manufacturing facility for product launch
 - EU: Orphan designation; potential for conditional approval based on current clinical evidence

Potential for Commercial Partners to Accelerate Regulatory Efforts, Market Preparation and Life Cycle Management

MPC-150-IM
Chronic Heart Failure
(CHF) Program

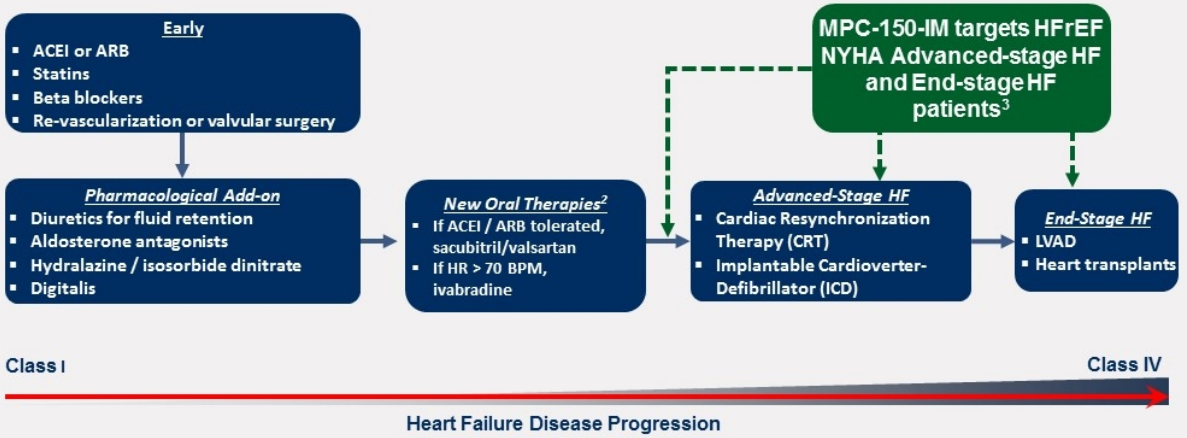


MPC-150-IM:

Targeting Patients with Worsening HF Despite Optimal Standard of Care



Common Treatment Pathway in CHF¹ MPC-150-IM Target Use



1. Source: Simon-Kucher & Partners 2017. Primary research 2017; Payers n=35, KOLs n=15, Cath lab managers n=4.
 2. Corlanor® (ivabradine) approved by FDA (April 2015). ENTRESTO® (sacubitril/valsartan) approved by FDA (July 2015).
 3. GlobalData-PharmaPoint Heart Failure (2016); McMurray et al., 2012; Yancy et al., 2013, 2016 ACC/AHA/HFSA. Focused Update on New Pharmacological Therapy for Heart Failure: An Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure.

MPC-150-IM: Product Development Strategy Following RMAT Designation for Heart Failure Patients With Left Ventricular Assist Devices (LVADs)



- Leverage data for potential near term market entry opportunity for MPC-150-IM in end-stage heart failure patients with LVADs
- Broaden market potential to Bridge to Recovery (BTR) market, representing a high-growth market opportunity for temporary LVAD use and possible explantation in end-stage, Class-IV heart failure patients
- Label extension through completion of phase 3 program (DREAM-HF) in NYHA class IIb/III heart failure patients

MPC-150-IM: Class IV Market Opportunity

Burden of Illness

- 250K – 300K patients/yr suffer from advanced systolic HF (NYHA Class IV)¹
- 50k patients/yr have end-stage heart failure
- Despite optimal medical therapy, 1-year mortality exceeds 50% in end-stage heart failure patients¹

Minimal Treatment Options

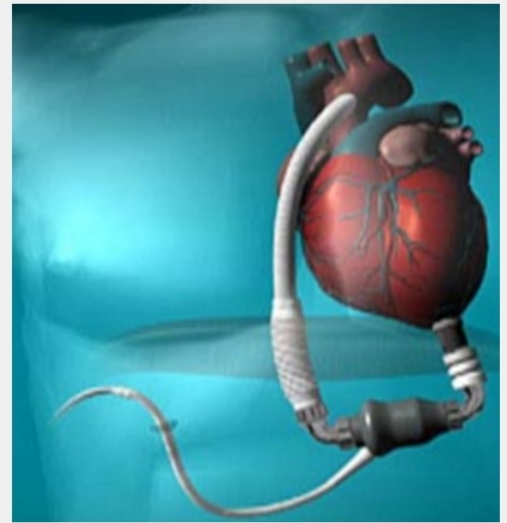
- Only ~2K heart transplants are performed in U.S. annually due to limited donors²
- LVADs have improved survival, but 1-year mortality remains at 20-30%¹
- Number of destination (permanent) LVADs implanted/yr are <5K due to associated high morbidity (e.g. GI bleeding and infection)

Unmet Need

- Strengthen native heart muscle
- Reduce re-hospitalizations
- Increase survival

Market Opportunity

- US LVAD market growing double-digit CAGR⁴
- US targeted commercial footprint (top 40 centers represent 75% of volume) provides low cost market entry³



1. Gustafsson G, Rogers J. (2017) Left ventricular assist device therapy in advanced heart failure: patient selection and outcomes. *European Journal of Heart Failure* 19, 595-602.
2. Agency for Healthcare Research and Quality. HCUFnet. ICD-9 principal procedure code 27.51 2014. . 3. Medicare provider charge inpatient-DRGALL-FY2014. . St. Jude Medical-2016-analyst and investor day

MPC-150-IM:

Phase 2b Trial Evaluating 150M MPCs in End-Stage Heart Failure Patients with LVADs

- The 159-patient, double-blind, placebo-controlled 2:1 randomized trial, is evaluating the safety and efficacy of injecting MPC-150-IM into the native myocardium of LVAD recipients
- Enrollment completed in Q3, CY2017
- Key safety and efficacy endpoints of the study:
 - Number of temporary weans from LVAD tolerated (through 6 months)
 - Time to re-hospitalization (through 12 months)
 - Patient survival (through 12 months)
 - Various quality of life measurements (through 12 months)
- Study is sponsored by Icahn School of Medicine, funded by the United States National Institutes of Health (NIH) and Canadian Health of Research Institute, and conducted by the NIH-funded Cardiothoracic Surgical Trials Network (CTSN)

- **RMAT designation for end stage heart failure with LVADs granted December 2017**
- **Phase 2B trial for Class IV; 12 month data read-out (Q3 CY18)**

MPC-150-IM: Class III Heart Failure Market Opportunity

Burden of Illness

- Globally, 17-45% of heart failure patients die within 1 year of hospital admission
- Majority die within 5 years of admission¹
- MPC-150-IM to target advanced HFrEF NYHA Class II-III with the objective of reducing major cardiovascular events (e.g. mortality and hospitalizations)

Minimal Treatment Options

- Despite recent advancements in pharmacotherapy, limited treatment options are available for patients with advanced NYHA Class II-IV Heart Failure with Reduced Ejection Fraction (HFrEF)²

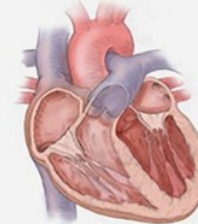
Unmet Need

- Therapy that reduces major cardiovascular events (e.g. mortality and hospitalizations) in patients with advanced HFrEF NYHA Class II – III

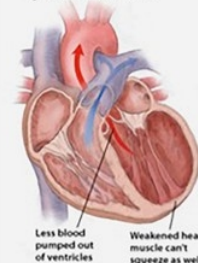
Market Opportunity

- NYHA Class II-IV patients with LVEF<40% in the US alone³
- Over \$60.2bn/yr in U.S. direct costs when this illness is identified as a primary diagnosis⁴
 - \$115bn as part of a disease milieu⁴; hospitalizations result in ~69% of expenditures⁵

Normal Heart



Systolic Heart Failure



1. Heart Failure: Preventing disease and death worldwide – European Society of Cardiology 2014. 2. ACC/AHA/HFSA Focused Update on New Pharmacological Therapy for Heart Failure: An Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure. 3. Gurwitz JH, Magid DJ, Smith DH, et al. Contemporary Prevalence and Correlates of Incident Heart Failure with Preserved Ejection Fraction. The American Journal of Medicine. 2013;126(5):393-400. Derived by applying a HF-REF prevalence rate of 32.6% to the U.S. rate of 5.7m U.S. patients. 4. A Reevaluation of the Costs of Heart Failure and its Implications for Allocation of Health Resources in the United States. Voigt J. Clin. Cardiol. 37, 5, 312-321 (2014). 5. The Medical and Socioeconomic Burden of Heart Failure: A Comparative Delineation with Cancer. Dimitrios, F. International Journal of Cardiology (2015), doi: 10.1016/j.ijcard.2015.10.172.

MPC-150-IM:

Operational Update for Phase 3 Trial in NYHA Class II-III Advanced CHF Patients



- Trial has enrolled more than 400 of approximately 600 patients
- In April 2017, a pre-specified interim futility analysis of the efficacy endpoint in the Phase 3 trial's first 270 patients was successfully achieved
- After completing the interim analysis, the trial's Independent Data Monitoring Committee (IDMC) formally recommended the trial be continued as planned
- Phase 3 trial targeted enrollment completion (2H CY18)

A 3D anatomical illustration of a human spine, showing the vertebrae and intervertebral discs. A medical gauge with a needle is positioned over one of the discs, and a syringe is shown injecting fluid into the disc. The background is a soft, glowing gradient of blue and purple.

Chronic Low Back Pain (CLBP) Due to Disc Degeneration

MPC-06-ID: A Non-Opioid Alternative for Chronic Low Back Pain Due to Degenerative Disc Disease

Burden of Illness

- Back pain causes more disability than any other condition¹
- Inflicts substantial direct and indirect costs on the healthcare system¹, including excessive use of opioids in this patient population

Minimal Treatment Options

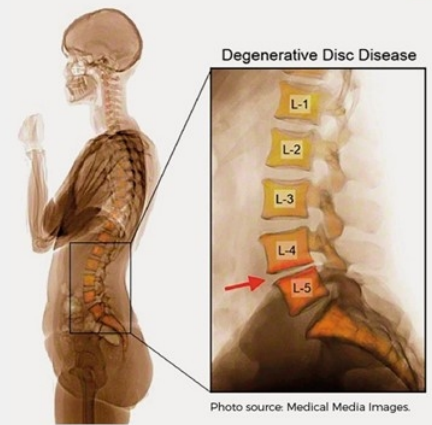
- Treatment options for patients with CLBP who fail conservative therapy include opioids and surgery
- 50% of opioid prescriptions are for chronic low back pain (CLBP)

Unmet Need

- Disease modifying therapy for durable improvement in pain and function
- Potential to prevent progression to opioid use or surgical intervention

Market Opportunity

- In 2016, over ~7m U.S. patients are estimated to suffer from CLBP due to degenerative disc disease(DDD)^{3,4,5}
- MPC-06-ID development program targets over ~3.2m patients



1. Williams, J., NG, Nawi, Peltzer, K. (2015) Risk factors and disability associated with low back pain in older adults in low-and middle-income countries. Results from the WHO Study on global ageing and adult health (SAGE). PloS One, 2015; 10(6): e0127880. 2. Simon, J., McAuliffe, M., Shamim, F. (2015) Discogenic Low Back Pain. Phys Med Rehabil Clin N Am 25 (2014) 305-317. 3. Decision Resources: Chronic Pain December 2015. 4. LEK & NCI opinion leader interviews, and secondary analysis. 5. Navigant: Commercial Assessment for a Proprietary Cell-Based Therapy for DDD in the U.S. and the EU3 - August 2014.

The Opioid Epidemic

- 50% of opioid prescriptions are for chronic low back pain (CLBP)
- Over 1,000 people are treated in U.S. emergency departments everyday for misusing prescription opioids
- Over 33,000 people in the U.S. died of prescription opioid related overdoses in 2016
- Opioid epidemic declared a public health emergency by U.S. President Trump in October, 2017
- A non-opioid solution for CLBP is imperative

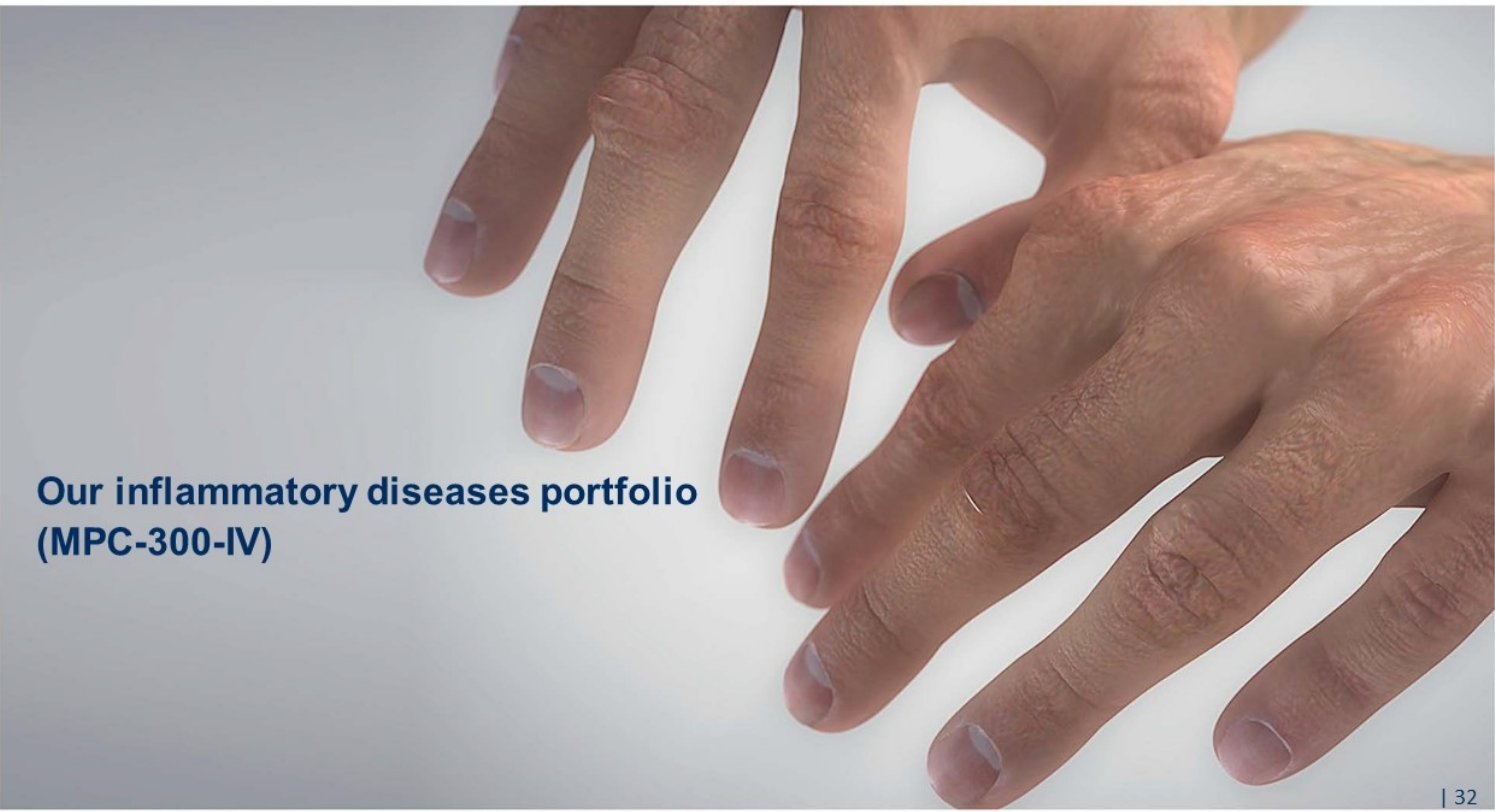
**The 21st Century Cures Act includes specific measures
to combat opioid dependence**

Information derived from Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released December, 2016. Available at: <http://wonder.cdc.gov/ucd10.html>. Substance Abuse and Mental Health Services Administration. Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health. Online Database, released September, 2016. Available at: <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.htm>
Jones CM. Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers - United States, 2002-2004 and 2008-2010. Drug Alcohol Depend. 2013 Sep 1;132(1-2):95-100. doi: 10.1016/j.drugalcdep.2013.01.007. Epub 2013 Feb 12.



- A 360-patient Phase 3 trial across U.S. and Australian sites
- Targeted to complete recruitment Q1 CY18
- FDA has provided written guidance:
 - Use of a composite primary endpoint at 12 and 24 months is acceptable
 - Agreed thresholds for pain (50% decrease in VAS) and function (15 point improvement in ODI)
 - No additional intervention at the treated level through 24 months

If the P3 results replicate P2 results in pain and function, leverage this product candidate as a potential non-opioid treatment option for chronic low back pain

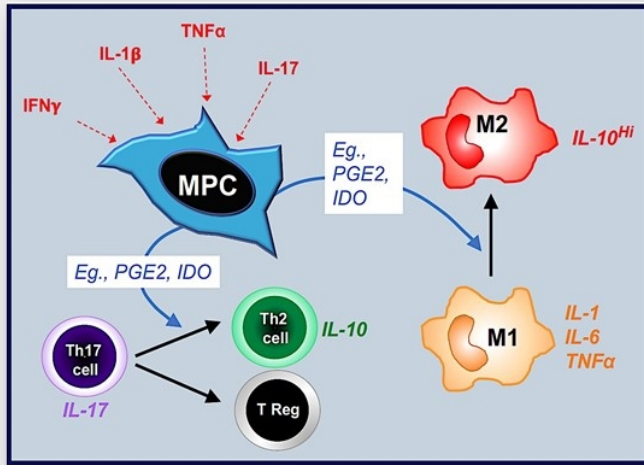


**Our inflammatory diseases portfolio
(MPC-300-IV)**

MPC-300-IV:

Being evaluated in immune mediated diseases where the cellular product candidate responds to multiple inflammatory signals by releasing factors that modulate the immune response

Phase 2 Clinical Data in Immune Mediated Diseases



- **60 patients, type 2 diabetes with inadequately controlled glucose:**
 - Randomized, placebo controlled dose-ranging study completed
 - Positive dose-dependent effects seen on reduction in HbA1c at 3 months¹
- **30 patients, diabetic kidney disease:**
 - Randomized, placebo controlled dose-ranging study completed
 - Positive effects seen on glomerular filtration rate and on inflammatory biomarkers over 6 months²
- **48 patients, biologic-refractory rheumatoid arthritis:**
 - Randomized, placebo controlled, dose-ranging study over 52 weeks
- **MPC-300-IV was well tolerated in all 3 Phase 2 studies**

1. Allogeneic Mesenchymal Precursor Cells in Type 2 Diabetes: A Randomized, Placebo-Controlled, Dose-Escalation Safety and Tolerability Pilot Study - Diabetes Care, July 2015
2. Allogeneic Mesenchymal Precursor Cells (MPC) in Diabetic Nephropathy: A Randomized, Placebo-controlled, Dose Escalation Study - E BioMedicine, October 2016

MPC-300-IV:

Phase 2 trial in biologic refractory Rheumatoid Arthritis shows early and durable effects after single dose

- Infusions were well-tolerated and there were no treatment-related serious adverse events reported, with the safety profile comparable among the placebo and two MPC treatment groups.
- A single intravenous MPC infusion in biologic refractory RA patients resulted in dose-related improvements in clinical symptoms, function, disease activity and patient-reported outcomes. Efficacy signals were observed for each of ACR 20/50/70, ACR-N, HAQ-DI, SF-36 and DAS-28 disease activity score.
- 2 million MPC/kg dose showed greatest overall treatment responses. Onset of treatment response occurred as early as 4 weeks, peaked at 12 weeks, was sustained through 39 weeks, and waned by 52 weeks.
- Greatest benefits over 52 weeks were seen in patients who had failed less than 3 biologics (1-2 biologic sub-group) prior to MPC treatment, identifying this as a potentially optimal target population

- **Phase 2 trial clinical responses along with the safety profile position MPC-300-IV as an early treatment option in RA patients who are resistant or intolerant to anti-TNF or other biologics**
- **Future studies will evaluate potential benefits of higher doses**



Financials & Milestones

Q2 FY18:

Cash Position and Cash Flows for the Half Year Ending 31 December 2017 (US\$m)

	31 Dec 2017	31 Dec 2016	\$Change	%Change
Operating net cash outflows	(35.2)	(46.4)	11.2	24%
Investing cash outflows	(0.7)	(0.3)	(0.4)	(133%)
Financing cash inflows/(outflows)	37.9	(0.1)	38.0	NM
Forex	(0.4)	(0.3)	(0.1)	(33%)
Net increase (decrease) in cash	1.6	(47.1)	48.7	103%

- Net cash outflows from Operating activities have reduced 24% (\$11.2 million) as a result of:
 - a reduction of \$4.7 million in payments to suppliers and employees; and
 - increased inflows of \$6.5 million relating to the upfront receipt of \$5.6 million upon execution of our patent license agreement with TiGenix NV (TiGenix) and increased receipts on sales of TEMCELL® Hs. Inj. in Japan

	31 Dec 2017	30 Jun 2017	\$Change
Cash on Hand	47.4	45.8	1.6

Q2 FY18:

Profit and Loss for the Half Year ending 31 Dec 2017 (US\$m)

For the six months ending	31 Dec 2017	31 Dec 2016	\$ Change	%
Revenue	14.6	0.9	13.7	NM
Research and Development	(31.6)	(29.0)	(2.6)	(9%)
Manufacturing Commercialization	(1.7)	(7.1)	5.4	76%
Management & Administration	(10.6)	(10.3)	(0.3)	(3%)
Contingent Consideration	8.7	(1.3)	10.0	NM
Other Operating Income & Expenses	1.1	0.8	0.3	39%
Loss Before Tax	(19.6)	(46.1)	26.5	58%
Taxation	26.2	6.2	20.0	NM
Profit / (Loss) After tax	6.7	(39.8)	46.5	117%

Revenue increased by \$13.7 million vs the comparative period in FY17

- **Commercialization revenue increased by 139% (\$0.9 million)** due to an increase in royalty income on sales of TEMCELL® Hs. Inj.
- **Milestone revenue increased by \$12.8 million** due to:
 - An upfront milestone of \$5.9 million (€5.0 million) was received upon execution of our patent license agreement with TiGenix in December 2017. In addition, a further milestone of \$5.9 million (€5.0 million) was also recognized under the agreement
 - Sales milestones of \$1.0 million were recognized on sales of TEMCELL® Hs. Inj.

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Overall management contained spend whilst increasing its R&D investment in Tier 1 clinical programs by deferring manufacturing production and constraining management and administration costs

- **R&D expenses increased by \$2.6 million (9%)** as management invested in Tier 1 clinical programs
- **Manufacturing Commercialization decreased by \$5.4 million (76%)** – sufficient clinical grade product on hand enabled the number of production runs to be reduced in the period vs the comparative half year period
- **Management & Admin costs increased by \$0.3 million (3%)** due to increased labour costs for non-cash share based payments partially offset by a reduction in costs as management contained rent, IT costs and professional service fees

Q2 FY18:

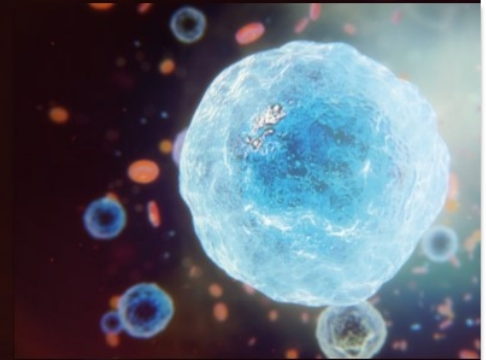
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- A non-cash income tax benefit of \$26.2 million was recognized in the half-year to 31 Dec 2017 primarily due to a revaluation of our deferred tax assets and liabilities recognized as a result of changes in US corporate income tax rates from 35% to 21% following the adoption of the Tax Cuts and Jobs Act
- The company recorded a profit after tax of \$6.7 million in the half year to 31 Dec 2017 compared with a loss after tax of \$39.8 million for the comparative period

Targeted Upcoming Milestones and Catalysts

- **MSC-100-IV for Pediatric Acute GVHD**
 - Day 28 primary endpoint data read-out (Q1 CY18) **COMPLETE**
 - Day 100 survival data (Q2 CY18)
 - Day 180 safety data (Q3 CY18)
- **MPC-06-ID for Chronic Low Back Pain**
 - Phase 3 trial expected to complete enrollment (Q1 CY18)
- **MPC-150-IM for Advanced and End-Stage Heart Failure**
 - Phase 2B trial for Class IV; 12 month data read-out (Q3 CY18)¹
 - Phase 3 trial for Class II/III targeted enrollment completion (H2 CY18)
- **Potential Corporate Partnerships**



1. Study is funded by the United States National Institutes of Health (NIH) and the Canadian Health Research Institute (CHRI), and conducted by the NIH-funded Cardiothoracic Surgical Trials Network (CTSN).



Questions?

