



Financial Results for the Quarter Ended March 31, 2018

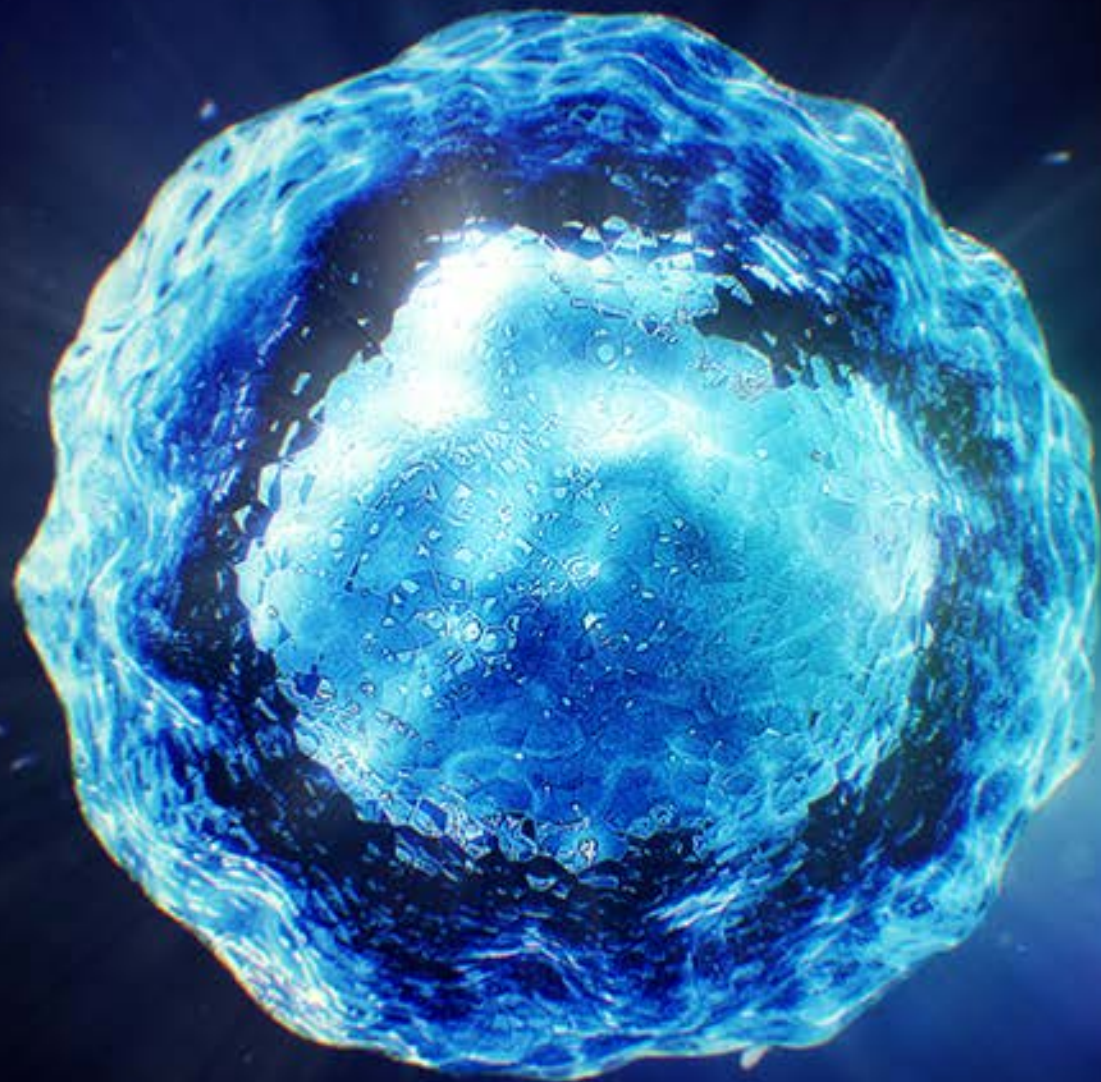
May 2018
Nasdaq: MESO ASX:MSB



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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.

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



Premier global cellular medicines company



Disruptive Technology Platform¹

- Immuno-selected, culture expanded cellular medicines
- Well characterized mechanisms of action targeting multiple pathways
- Extensive, robust IP estate
- Targeting the most severe disease states refractory to conventional therapies

Industrial Scale Manufacturing

- Unique cell properties enable large scale expansion and use in unrelated recipients
- Proprietary media formulations meet industrial scale needs
- 'Off the shelf' delineated products with batch to batch consistency and reproducibility

Multiple Revenue Generating Products & Phase 3 Assets

- 2 approved products commercialized by licensees in Japan² and Europe³
- 3 product candidates in U.S. Phase 3
- Major near-term data readouts
- Revenue from approved and late-stage assets will help fund deep product pipeline

1. Mesenchymal precursor cells (MPCs) and their culture-expanded progeny mesenchymal stem cells (MSCs)

2. TEMCELL[®] Hs Inj licensee JCR Pharmaceuticals Co., Ltd. received the first full PMDA approval for an allogeneic cellular medicine in Japan

3. Alofisel[®] licensee TiGenix NV/Takeda received first central marketing authorization (MA) approval from the European Commission (EC) for an allogeneic stem cell therapy

Clinical pipeline and products commercialized by licensees

PLATFORM	PRODUCT	THERAPEUTIC AREA	APPROVAL	COMMERCIAL RIGHTS
MSC (Bone Marrow)	TEMCELL® HS Inj ¹	Acute GVHD	✓	JCR Japan Only
MSC (Adipose)	Alofisel ²	Perianal Fistula	✓	TiGENIX Takeda World Wide

MARKETED

	PLATFORM	PRODUCT CANDIDATE	THERAPEUTIC AREA	PRE-CLINICAL / PRE-IND	PHASE 2	PHASE 3	COMMERCIAL RIGHTS
	TIER 1	MSC	MSC-100-IV	Acute GVHD	[Progress Bar]		
MPC		MPC-150-IM	Advanced HF (Class II & III) End-Stage HF (Class III & IV) ³	[Progress Bar]			mesoblast the regenerative medicine company
MPC		MPC-06-ID	Chronic Low Back Pain	[Progress Bar]			mesoblast the regenerative medicine company
MPC		MPC-300-IV	Rheumatoid Arthritis Diabetic Nephropathy	[Progress Bar]			mesoblast the regenerative medicine company

IN DEVELOPMENT

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)

1. Mesoblast receives royalty income on sales of TEMCELL® in Japan by its licensee JCR Pharmaceuticals Co Ltd
2. Mesoblast will receive royalty income on world wide sales of Alofisel® in the local treatment of perianal fistulae by its licensee TiGenix NV/Takeda Pharmaceuticals
3. Study funded by the United States National Institutes of Health (NIH) and the Canadian Health Research Institute; conducted by the NIH-funded Cardiothoracic Surgical Trials Network

This chart is figurative and does not purport to show individual trial progress within a clinical program



Financials

Q3 FY18

Cash position and cash flows for the nine months ending March 31, 2018 (US\$m)

	March 31, 2018	March 31, 2017	\$Change	%Change
Operating net cash (outflows)/inflows	(54.8)	(72.0)	17.2	24%
Investing net cash (outflows)/inflows	(0.7)	0.1	(0.8)	NM
Financing net cash inflows	69.6	59.9	9.7	16%
Forex	(0.3)	0.2	(0.5)	NM
Net increase/(decrease) in cash	13.8	(11.8)	25.6	NM

	March 31, 2018	June 30, 2017	\$Change
Cash on Hand	59.5	45.7	13.8

- Operating net cash flows reduced by 24% for the 9 months ended March 31, 2018 versus the prior period.
- US\$59.5 million cash on hand includes a US\$35 million draw down of a non-dilutive, four-year, US\$75 million credit facility with Hercules Capital, Inc.
- The facility has an interest only period up to 30 months upon the satisfaction of certain conditions, and no warrants

Q3 FY18

Profit and Loss for the nine months ending March 31, 2018 (US\$m)

For the nine months ending	March 31, 2018	March 31, 2017	\$Change	%
Revenue	15.6	1.8	13.8	NM
Research and Development	(48.4)	(43.0)	(5.4)	(13%)
Manufacturing Commercialization	(3.4)	(10.9)	7.5	69%
Management & Administration	(16.7)	(15.9)	(0.8)	(5%)
Contingent Consideration	7.9	7.8	0.1	1%
Other Operating Income & Expenses	1.2	1.2	-	0%
Finance Costs	(0.4)	-	(0.4)	NM
Loss Before Tax	(44.2)	(59.0)	14.8	25%
Income Tax Benefit	29.7	9.3	20.4	NM
Loss After Tax	(14.5)	(49.7)	35.2	71%

Revenue increased by US\$13.8 million vs the comparative period in FY17 due to:

- 162% increase in commercialization revenue (US\$1.6 million) from royalty income on sales of TEMCELL[®] Hs. Inj.
- An upfront payment of US\$5.9 million (€5.0 million) received upon execution of our patent license agreement with TiGenix in December 2017
- A future payment from TiGenix of US\$5.9 million (€5.0 million), due by December 2018, was recognized
- US\$0.5 million sales milestone recognized on sales of TEMCELL[®] Hs. Inj.

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Loss after tax reduced by US\$35.2 million (71%) for the 9 months ended March 31, 2018 versus the comparative period of FY17 due to:

- Reduced spend on manufacturing by 69% due to sufficient clinical product having been manufactured in the comparative period of FY17 for ongoing Phase 3 trials
- A non-cash income tax benefit recognized due to revaluation of deferred tax assets and liabilities after changes in US corporate income tax rates

Disruptive cellular medicine technology

- STRO-1⁺ Mesenchymal Precursor Cells (MPCs) are at the apex of the hierarchy of Mesenchymal Lineage
- STRO-1/STRO-3 immuno-selection provides a homogeneous population of MPCs with receptors that respond to activating inflammation and damaged-tissue signals
- In response to activating signals present in the endogenous environment, MPCs secrete a diverse variety of biomolecules responsible for immunomodulation and tissue repair
- Targeting multiple pathways may result in greater therapeutic benefits in complex diseases

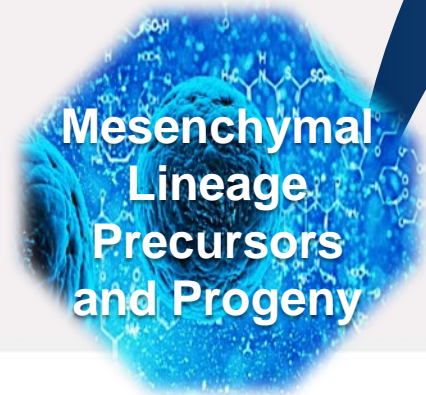


1. Simmons PJ, et al, Blood. 1991;78:55-62
2. Gronthos S, et al, J Cell Sci. 2003;116(Pt 9):1827-35

3. See F, et al, J Cell Mol Med. 2011;15:2117-29
4. Psaltis PJ, et al, J Cell Physiol. 2010;223(2):530-40

Global IP estate provides substantial competitive advantage

- ~800 Patents and patent applications (69 Patent families) across all major jurisdictions
- Covers composition of matter, manufacturing, and therapeutic applications of MLCs
- Provides strong commercial protection for product candidates under development
- Enables licensing to third parties for indications, when in alignment with our corporate strategy



**Mesenchymal
Lineage
Precursors
and Progeny**

Markets
U.S., Europe,
China, and
Japan

Sources
Allogeneic, Autologous,
(Bone Marrow, Adipose,
Dental Pulp, Placenta),
Pluripotent
(iPS)

Diseases
All Tier 1 & Tier 2
Indications, and multiple
additional conditions

Industrial scale manufacturing

- Immune privileged cellular technology platform enables allogeneic ‘off the shelf’ product candidates
- Scalable culture expansion sufficient to produce anticipated commercial quantities
- Proprietary media formulations, advances in development of 3D bioreactor technology and automation to deliver step-changes in yield and significant COGS reductions

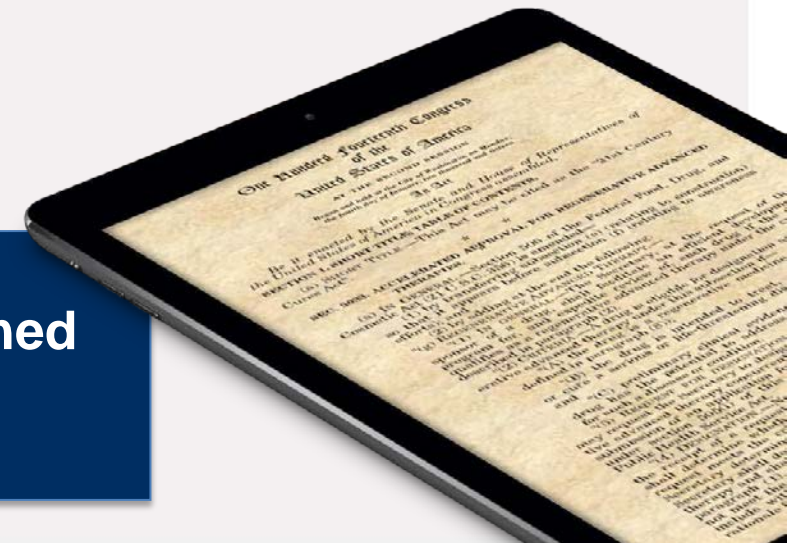


The 21st Century Cures Act (Cures Act)

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 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*
 - *Potential to utilize surrogate endpoints for accelerated review*
 - *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 review pathways under the Cures Act



Clinical pipeline

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TIER 1	MSC	MSC-100-IV	Acute GVHD				 <i>the regenerative medicine company</i>
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	MPC	MPC-06-ID	Chronic Low Back Pain				 <i>the regenerative medicine company</i>
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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)						

IN DEVELOPMENT

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CY 2018 corporate milestones



MSC-100-IV for Acute Graft versus Host Disease

- Successfully met Day 28 primary end point pediatric Phase 3 trial (Q1 CY18) ✓
- Day 100 survival/safety data pediatric Phase 3 trial (Q2 CY18)
- Day 180 survival/safety data pediatric Phase 3 trial (Q3 CY18)

MPC-150-IM for Advanced and End-Stage Heart Failure

- 12 month data read-out for trial in end-stage heart failure patients with LVADs (Q3 CY18)
- Phase 3 events-driven trial for advanced heart failure (Class II/III) enrollment completion (H2 CY18)

MPC-06-ID for Chronic Low Back Pain

- Phase 3 trial completed enrollment (Q1 CY18) ✓

Access non-dilutive, capital for commercialization of MSC-100-IV (remestemcel-L) ✓

Establish U.S., global and regional commercial partnerships for high volume products



Questions

Thank you

