



Operational Highlights and Financial Results for the Half Year Ended December 31, 2016

February 2017



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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.



Agenda

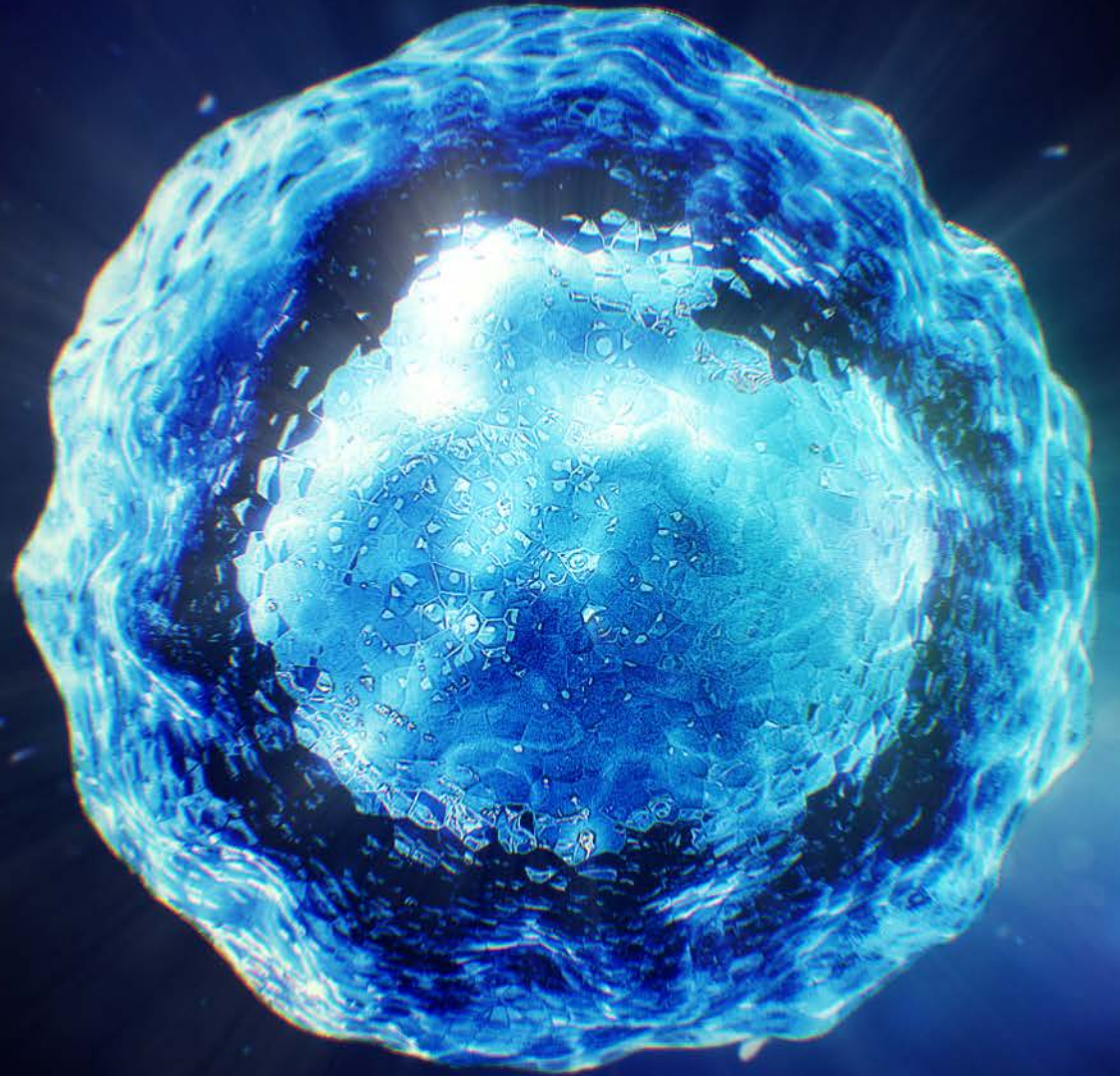
- Strategic Update
- Financial Results
- Operational Update
- Timelines



Strategic Update

Our Mission, Vision and Focus:

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



Compelling Investment Proposition:

Building a Leading Franchise of Cellular Medicines

Leader in Disruptive Cellular Technology Platform

- Extensive patent portfolio
- Highly potent immuno-selected mesenchymal lineage precursors and progeny
- Mechanism of action through release of biomolecules to modify multiple disease-specific pathways
- Deep expertise in cellular pathways and mechanisms

Proven Capability for Commercial Translation

- Scalable industrialized manufacturing
- “Off the shelf” product capabilities to target large markets
- Proven understanding of regulatory and reimbursement landscape
- TEMCELL® HS. Inj. (aGVHD), approved in Japan¹

Advanced Pipeline of Cellular Medicines

- Three Tier 1 product candidates in Phase 3, one in Phase 2
- Focused on serious and life-threatening diseases with commensurate pricing
- Evidenced-based clinical data in place supporting efficacy across multiple indications
- Multiple upcoming clinical milestones & corporate development

* Mesenchymal lineage adult stem cells (MLCs) including mesenchymal precursor cells (MPCs) and culture-expanded mesenchymal stem cells (MSCs).

1. Commercialization rights to Japan were out-licensed to JCR Pharmaceuticals.

Portfolio of Advanced Product Candidates:

Ideally Positioned for the 21st Century Cures Act Environment

							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	→			Japan	
	MPC	MPC-06-ID	Chronic Low Back Pain	→				
	MPC	MPC-300-IV	RA DN/Type 2 Diabetes	→				
	MSC	TEMCELL® HS Inj MSC-100-IV	Acute GVHD Acute GVHD	→				
				→				
Tier 2	Includes MSC-100-IV (Crohn's disease – biologic refractory), MPC75-IA (Acute Cardiac Ischemia), MPC-25-Osteo (Spinal Fusion) and MSC-75-IA (Knee Osteoarthritis)							

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.

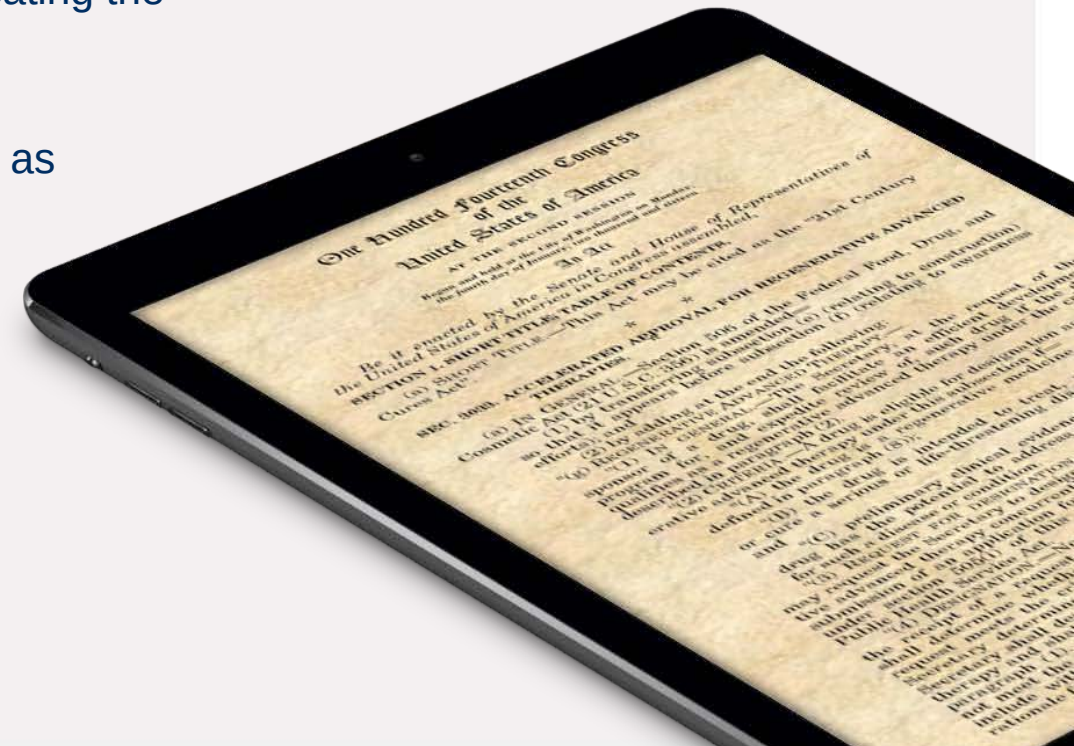
Tier 1 programs represent our lead programs where we focus the majority of our time and resources. Tier 2 programs are also in development and may advance to Tier 1 depending on the merit of newly generated data, market opportunity or partnering options.

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.

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

Legislation for An Expedited Approval Path for Cellular Medicines Designated as Regenerative Advanced Therapies

- Cellular medicines may be designated as regenerative advanced therapies, if they are intended to treat, modify, reverse, 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:
 - 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*





Recent Corporate Development:

Negotiations for a Development and Commercialization Partnership Underway

- December 22, 2016 - Entered into an equity purchase agreement with Mallinckrodt Pharmaceuticals for ~US\$ 21.7 million¹
 - Exclusively negotiate a commercial and development partnership for:
 - MPC-06-ID for moderate/severe chronic low back pain due to disc degeneration
 - MSC-100-IV for acute GVHD
 - Exclusive period of up to 9 months for the two product candidates in all territories outside of Japan and China
- **Mallinckrodt Pharmaceuticals**
 - Gains a significant opportunity to opt-in to a pipeline of transformative regenerative therapy assets in late-stage development
 - Track record of success in commercializing medicines for immune-mediated diseases and pain management
 - **Mesoblast Limited**
 - Leadership position in cellular-based medicines
 - Best-in-class allogeneic, “off-the-shelf” mesenchymal lineage adult stem cell platform

1. Mallinckrodt has bought approximately 20.04 million (4.99%) of Mesoblast's ordinary shares.



Financial Results



H1 FY 2017:

Financial Highlights US\$m

- At December 31, 2016, cash reserves were US\$55.6 million after adjusting for US\$21.7 million from the equity purchase agreement with Mallinckrodt announced on December 23, 2016; proceeds received on January 6, 2017
- The Company executed on its operational streamlining successfully absorbing the incremental costs of the MPC-150-IM program in advanced chronic heart failure (CHF)
 - Operating cash outflows for the half-year FY2017 excluding MPC-150-IM for CHF were reduced by 22% (US\$11.5 million)
 - After absorbing the incremental R&D costs associated with the CHF program, total operating cash outflows were US\$47.3 million, still a reduction of 9% (US\$4.6 million)
- A fully discretionary equity facility was established in July 2016 for up to \$A120 million/\$US90 million over 36 months

FY 2017:

Cash Position (US\$m)

	31 Dec 2016	30 Sep 2016	30 Jun 2016
Reported Cash on hand	33.9	60.4	80.9
Equity purchase agreement	21.7	-	-
Adjusted Cash on hand	55.6	60.4	80.9

- Adjusted Cash on 31 December 2016 equals Reported Cash plus US\$21.7 million cash received on 6 January 2017 from the equity purchase agreement with Mallinckrodt Pharmaceuticals announced on 23 December 2016
- As previously announced, a fully discretionary equity facility has been established for up to \$A120 million/\$US90 million over 36 months

Operational Streamlining:

Update (US\$m)

From August 2016, the Company executed a range of cost reduction initiatives in order to offset the incremental costs of the MPC-150-IM program in FY17. **\$11.5 million** of savings have been generated by these initiatives in the first six months of FY17 as follows:

- **\$3.4 million** within R&D: a 31% reduction in FTEs was achieved primarily through a labor restructure. This, combined with the cost containment of consultants and travel have reduced product support costs within R&D by 29% in comparison with 1H FY16
- **\$7.2 million** within Manufacturing Commercialization: Costs were reduced by 51% as the Company had sufficient clinical grade product on hand to reduce the number of production runs in this period; there were also savings arising from the labor restructure, combined with cost containment of consultants and travel
- **\$0.9 million** within Management and Administration: Costs were reduced by 8% resulting from reductions in full time equivalents, consultancy expenses, and reductions in corporate overhead expenses such as rent, legal and professional fees and other office expenses

FY 2017:

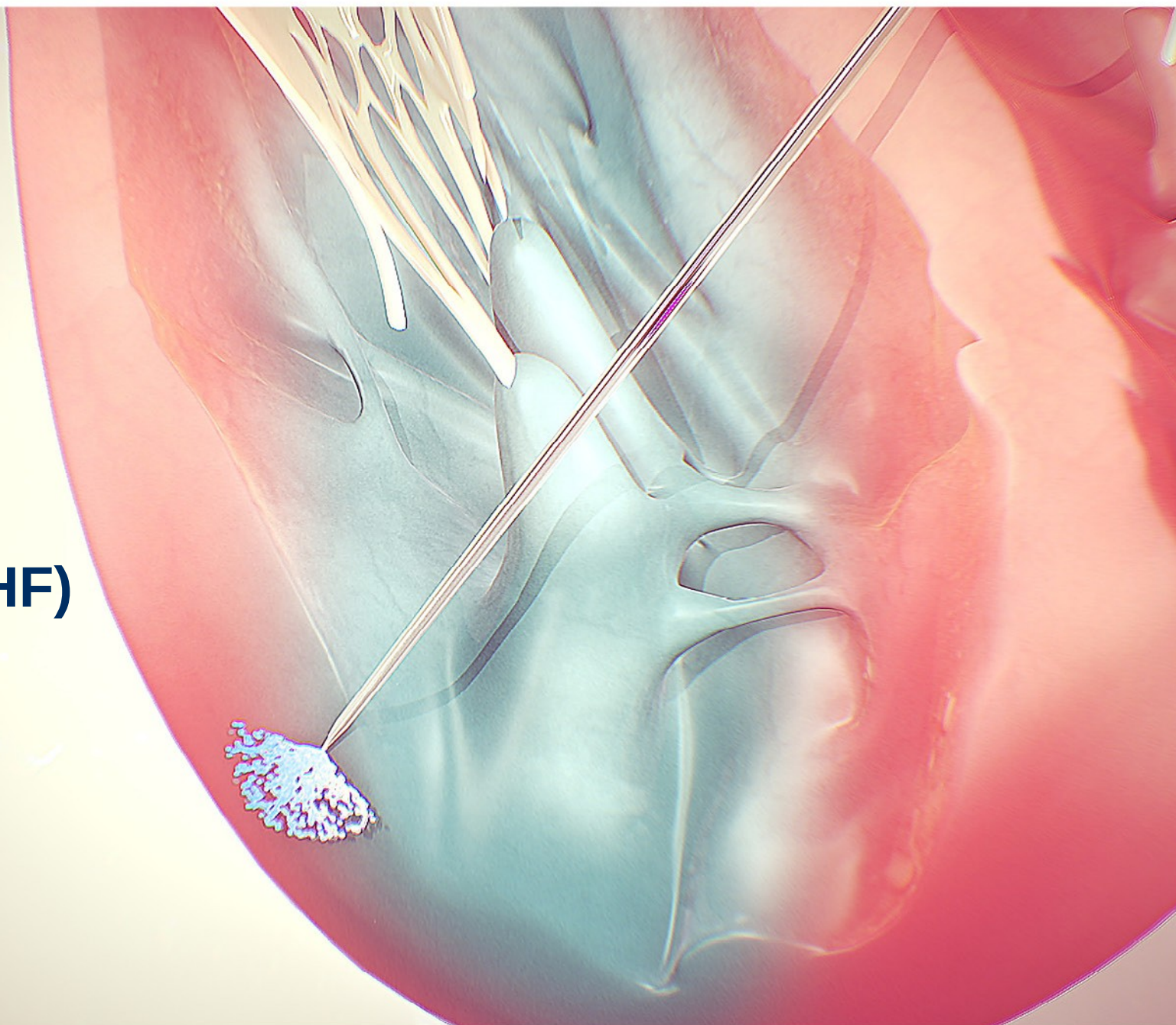
Operating Cash flows reduced by Operational Streamlining (US\$m)

	31 Dec 2016	31 Dec 2015	\$ Change
Operating Cash flows for the first six months			
Payment to Suppliers and Employees	(47.3)	(51.9)	4.6
Commercialization revenue received	0.6	-	0.6
Milestone revenue received	-	3.5	(3.5)
Interest received	0.3	0.5	(0.2)
Net Cash outflows in operating activities	(46.4)	(47.9)	1.5

Payments to Suppliers and Employees were reduced by 9% (\$4.6 million) in the first six months as savings from operational streamlining activities in R&D, Manufacturing Commercialization and Management and Administration more than offset the incremental R&D costs associated with the MPC-150-IM CHF program



Operational Highlights

A medical illustration of a heart, showing the ventricles and coronary arteries. A catheter is inserted into the heart, and a small cluster of cells is being introduced into the myocardium. The background is a gradient of red and orange.

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

**Multi-billion dollar
blockbuster potential**

MPC-150-IM:

Targets the Most Serious and Life-Threatening Complications of Heart Failure

Significant Burden of Illness and Unmet Need

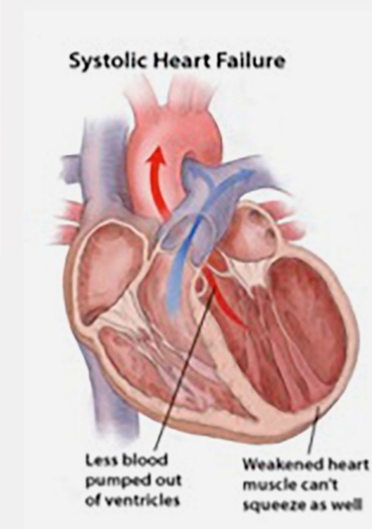
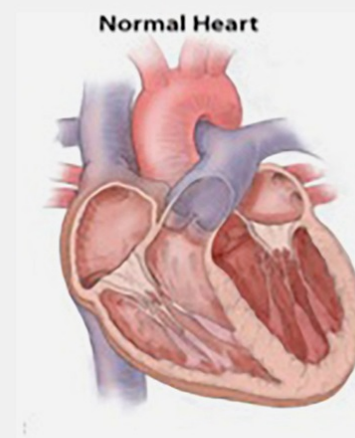
- Globally, 17-45% of heart failure patients die within 1 year of hospital admission
- Majority die within 5 years of admission¹
- MPC-150-IM to target advanced HFrEF NYHA Class II-III with the objective of reducing major cardiovascular events (e.g. mortality and hospitalizations)

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

Attractive Market Opportunity

- ~1.9m 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



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. Clinl.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 of MPC-150-IM in New York Heart Association (NYHA) Class II-III advanced CHF patients



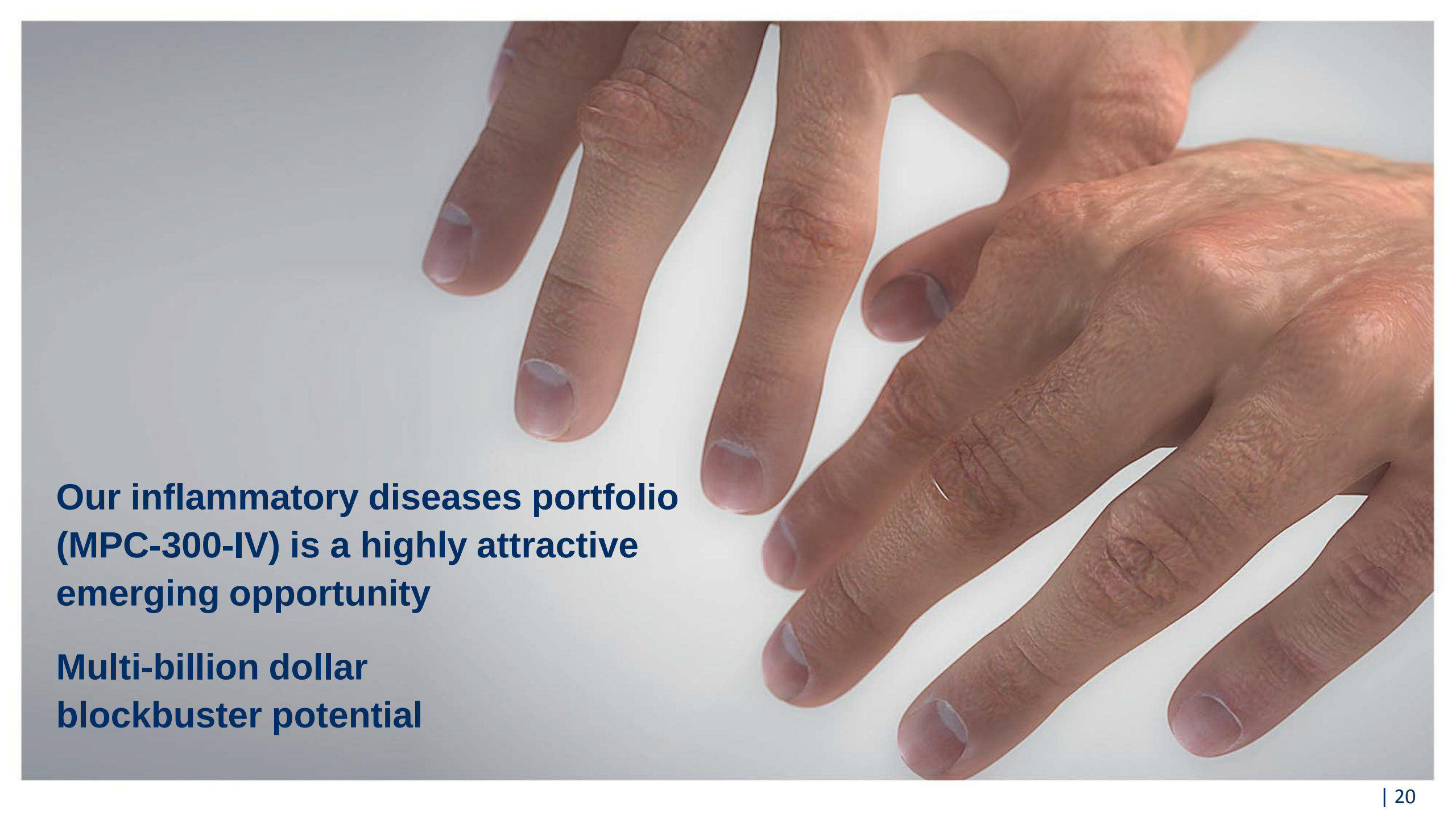
- This trial's primary endpoint is a comparison of recurrent heart failure-related major adverse cardiovascular events (HF-MACE) in advanced CHF patients receiving either MPC-150-IM by catheter injection into the left ventricular heart muscle or sham control
- More than 300 advanced CHF patients have been enrolled to date in this Phase 3 trial
- After reviewing patient data at two time points, in April and October 2016, the trial's Data Monitoring Committee (DMC) maintained its recommendation that the study should continue as planned
- An interim analysis of the trial's primary endpoint is planned for Q1 CY2017

MPC-150-IM:

Operational Update for Phase 2b trial in patients with end-stage heart failure who have received a left ventricular assist device (LVAD)

- This program is sponsored and funded by the United States National Institutes of Health (NIH).
- Enrollment of this trial totalling ~150 patients is expected to be completed during 1H CY2017
- Top-line results expected during 2H CY2017

Results from these trials will be used to guide discussions with the FDA in line with the 21st Century Cures Act for potential approval pathways for MPC-150-IM

A close-up photograph of two hands against a light blue background. The hands show signs of skin conditions, including redness, swelling, and small blisters, particularly on the fingers and palms. The lighting is soft, highlighting the texture of the skin.

**Our inflammatory diseases portfolio
(MPC-300-IV) is a highly attractive
emerging opportunity**

**Multi-billion dollar
blockbuster potential**

MPC-300-IV: Biological Refractory Rheumatoid Arthritis (RA)

Market Landscape

Market Size

- There are approx 6.0 million prevalent cases in the US, Japan, and EU5, with 2.9 million in the US alone in 2016^{1,2}
- In 2016, sales of RA agents, predominantly TNF inhibitors exceeded \$19 billion globally
- Projections of over \$22.5 billion by 2025, due to sales of oral JAK inhibitors, TNF biosimilars³

Significant Unmet Need

- ~1/3 of RA patients do not respond or cannot tolerate TNF inhibitors
- Low disease activity or remission is seen in low numbers of patients refractory to TNF inhibitors treated with alternative biologic agents²
- Biologics are associated with increased incidence of opportunistic infections and malignancies

MPC-300-IV May Potentially Fill the Treatment Gap

- Need for disease-modifying therapies that are well tolerated and induce low disease activity or remission in a greater percentage of patients as early as possible in the disease management
- Biologics only target single cytokine pathways, even though RA involves multiple signals / pathways
- MPCs potentially target multiple cytokines concomitantly without risk of infectious complications

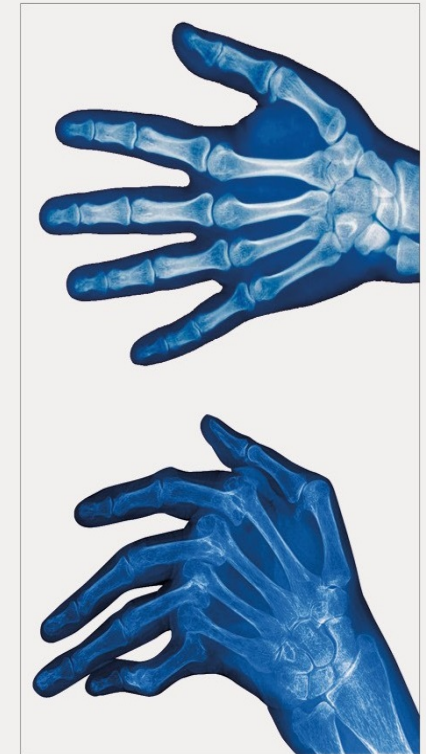


Photo source: WebMD.

1. GlobalData©: Rheumatoid Arthritis Global Forecast 2015-2025 0- January 2017
2. Decision Resources Rheumatoid Arthritis Dec 2015
3. Decision Resources Rheumatoid Arthritis April 2016

MPC-300-IV:

Phase 2 Study design

- Phase 2 double-blind, randomized, placebo-controlled, dose-escalating study comparing a single infusion of two MPC doses (1M/kg and 2M/kg) with placebo in patients with active RA
 - *Inadequate response to at least 1 anti-TNF +/- other biologics*
 - *On a stable regimen methotrexate for >4 months +/- DMARDs for >3 months*
 - *+ RF and/or anti-CCP*; ≥ 4 swollen/tender joints; ESR or CRP > upper limit of normal*
- 48 patients enrolled at 14 sites in US and Australia**
 - *MPC 1×10^6 cells/kg (N=16 active)*
 - *MPC 2×10^6 cells/kg (N=16)*
 - *Placebo (N=16)*
- All cohorts were well matched for disease activity and other demographics at baseline

*RF=Rheumatoid factor; anti-CCP=Cyclic citrullinated peptide antibody

** ClinicalTrials.gov Identifier: NCT01851070

MPC-300-IV:

Phase 2 Trial Results

- The safety profile over 39 weeks was comparable among the placebo and both MPC treatment groups, with no cell-related serious adverse events
- Both MPC doses outperformed placebo at week 39 in each of ACR20/50/70 responses, as well as by median ACR-N analysis
- Continuous variables ACR-N, HAQ-DI and DAS-28 were used in line with the FDA Guidance For Industry Rheumatoid Arthritis: Developing Drug Products For Treatment, May 2013, and identified the 2 million MPC/kg dose as the most effective over 39 weeks
- The 2 million MPC/kg dose showed the earliest and most sustained treatment benefit

Given the serious nature of anti-TNF resistant RA, we believe that MPC-300-IV is well-positioned to be developed as a regenerative advanced therapy to target this major unmet medical need.

Summary of Key Efficacy Responses at 3 and 9 Months:

All Subjects



	Week 12			Week 39		
	Placebo	1M/kg	2M/kg	Placebo	1M/kg	2M/kg
	N=16	N=16	N=16	N=16	N=16	N=16
ACR20	50%	47%	53%	36%	69%	57%
ACR50	19%	27%	40%	14%	31%	21%
ACR70	0%	20%	27%*	0%	23%	21%
ACR-N median	20%	11%	28%	9%	27%	27%
ACR-N mean Area Under Curve (AUC)	204.7	602.6	1476.3*	1952.4	3033.4	8326.4*
HAQ-DI <-0.22	38%	53%	93%*	46%	75%	64%
HAQ-DI (LS mean change from baseline)	-0.2	-0.3	-0.5*	-0.1	-0.5	-0.5*
DAS28-CRP (LS mean change from baseline)	-1.4	-1.3	-2.0	-1.8	-1.9	-2.4
DAS28-CRP ≤3.2	19%	27%	36%	29%	54%	50%

* p<0.05 with p-values vs. placebo from Fisher's exact test for frequencies, from ANCOVA model using treatment as factor and baseline value as covariate for mean change, from one-way ANOVA on ranks for median ACR-N, and from t-test on log-transformed geometric mean for ACR-N AUC.

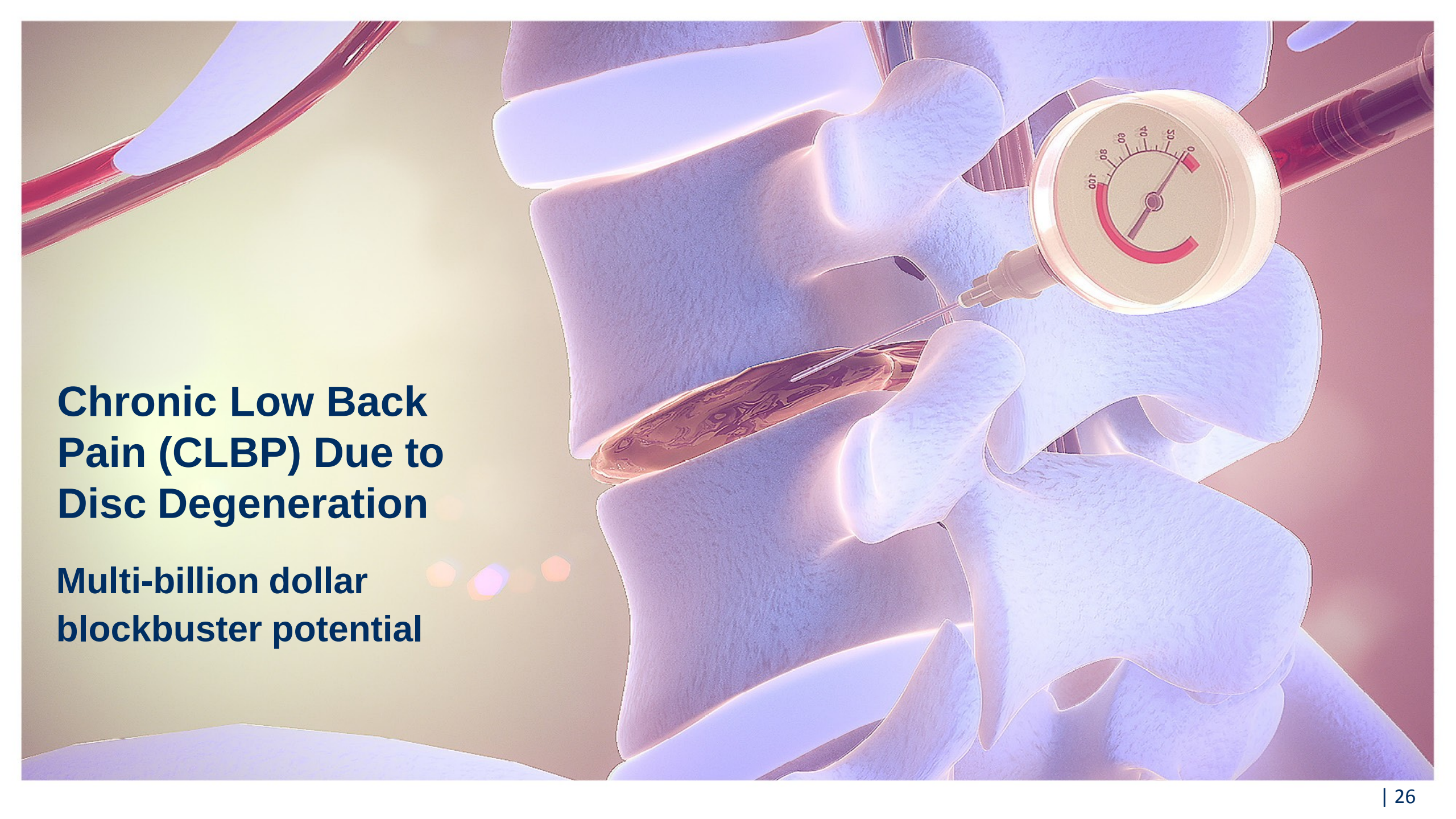
Summary of Key Efficacy Responses at 3 and 9 Months:

Sub-group with Prior Use of 1-2 Biologics



	Week 12			Week 39		
	Placebo	1M/kg	2M/kg	Placebo	1M/kg	2M/kg
	N=9	N=10	N=11	N=9	N=10	N=11
ACR20	33%	60%	55%	22%	67%	60%
ACR50	11%	30%	55%	0%	33%	30%
ACR70	0%	20%	36%	0%	22%	30%
ACR-N median	13%	28%	50%	6%	43%	48% *
ACR-N mean Area Under Curve (AUC)	-393.0	1629.8	1713.8	-1567.0	7786.6*	10102.9*
HAQ-DI <-0.22	33%	60%	91%*	44%	67%	70%
HAQ-DI (LS mean change from baseline)	-0.1	-0.4	-0.6	-0.1	-0.4	-0.6*
DAS28-CRP (LS mean change from baseline)	-1.1	-1.8	-2.4	-1.8	-2.0	-2.8
DAS28-CRP ≤3.2	22%	30%	40%	33%	56%	67%

* p<0.05 with p-values vs. placebo from Fisher's exact test for frequencies, from ANCOVA model using treatment as factor and baseline value as covariate for mean change, from one-way ANOVA on ranks for median ACR-N, and from t-test on log-transformed geometric mean for ACR-N AUC.

An illustration of a human spine in cross-section, showing the vertebrae and intervertebral discs. A medical needle is shown injecting a substance into one of the discs. A pressure gauge is attached to the needle, with a red needle pointing to a value around 20 on a scale from 0 to 100. The background is a soft, warm gradient of orange and yellow, with some blurred light spots.

Chronic Low Back Pain (CLBP) Due to Disc Degeneration

**Multi-billion dollar
blockbuster potential**

MPC-06-ID:

Alternative to Invasive Surgery and Opioid Use for Chronic Low Back Pain Patients

Significant Burden of Illness and Unmet Need

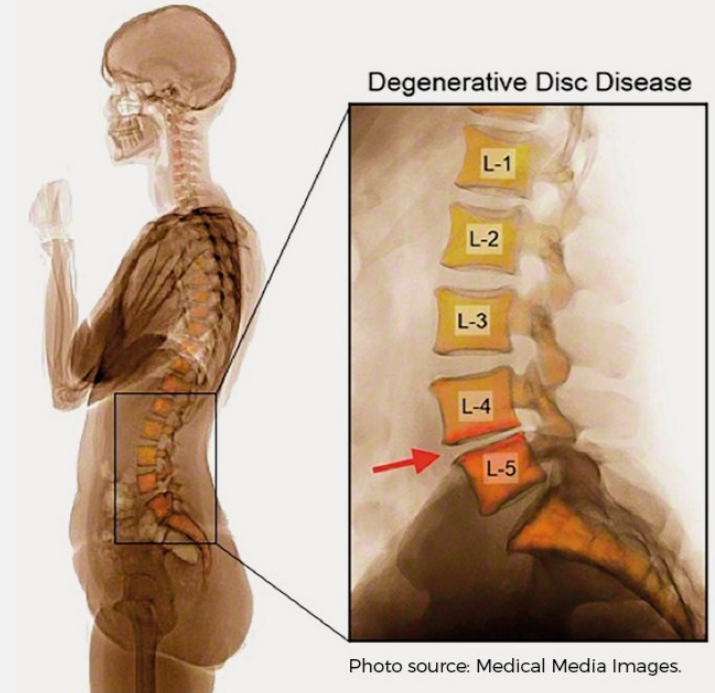
- Back pain causes more disability than any other condition¹
- Inflicts substantial direct and indirect costs on the healthcare system¹, including excessive use of opioids in this patient population

Minimal Treatment Options

- Patients failing opioids and epidural steroids are limited to highly invasive surgical procedures²

Attractive 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, Pelzter, 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.

MPC-06-ID:

Phase 3 Trial Operational Update

- The 24-month results from the Company's 100-patient Phase 2 trial of MPC-06-ID for treatment of CLBP were presented at the 24th Annual Scientific Meeting of the Spine Intervention Society; received the 2016 Best Basic Science Abstract award
- A 360-patient Phase 3 trial is recruiting well across sites in US and Australia
- On track to complete recruitment in 2017
- FDA has provided written guidance:
 - *Use of a composite primary endpoint is acceptable for approval*
 - *Primary endpoint aims to provide an alternative to surgery*
 - *Agreed thresholds for pain (50% decrease in VAS) and function (15 point improvement in ODI)*
 - *Two timepoints (12 and 24 months) for meeting pain and functional improvement criteria*
 - *No intervention at the treated level through 24 months*

A close-up photograph of a person's hand, specifically the index finger, which is holding a medical device. The device consists of a white, flexible tube that connects to a small, white, cylindrical component. This component is attached to a larger, purple, rectangular device that is secured to the back of the hand with a white elastic band. The purple device has a small, circular opening on its side. The background is a plain, light blue surface.

Acute Graft vs Host Disease (aGVHD)

**Our nearest-term revenue product candidate:
MSC-100-IV for steroid-refractory aGVHD**

MSC-100-IV: Acute Graft vs Host Disease

Serious and Life-Threatening Complication of Bone Marrow Transplants

Significant Burden of Illness and Unmet Need

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

Minimal Treatment Options

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

Attractive Market Opportunity

- ~30,000 allogeneic BMTs performed globally (~20K US/EU5) annually, ~20% pediatric^{4,5}
- Received approval in Japan (TEMCELL® HS Inj.) for aGVHD in 2015; reimbursed up to ~\$USD195k per full treatment course³



1. West, 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.

Acute Graft vs Host Disease:

Product Development Strategy

Pediatric GVHD0001/GVHD002: Phase 3 study ongoing, ~40 sites planned¹

- *Multi-center, single-arm, open-label to evaluate efficacy and safety to day 100 (study 001) and from day 100 to day 180 (study 002)*
- *At least 60 pediatric patients (2 months to 17 years inclusive)*
- *aGVHD following allogeneic HSCT failing systemic corticosteroid therapy*



Endpoints¹:

- Primary endpoint: Overall response at Day 28
- Key secondary endpoint: Survival at Day 100 in responders at Day 28
- Subjects evaluated at Days 28, 56 and 100 in study 001, and out to Day 180 in study 002

Adult GVHD

- *Complete targeted Phase 3 study in high-risk subset of adult patients with aGVHD (liver and gut disease)*
- *Market development and access work in parallel*
- *Launch adult product in major markets planned for 2021*

1. Clinicaltrials.gov identifier: NCT02652130.

GVHD001:

Successful Interim Futility Analysis in 4Q CY16

- Predefined Bayesian futility rule determined predictive probability of success using the primary endpoint of Day 28 overall response
- Method determined the likelihood of obtaining a statistically significant treatment effect at study completion, conditional on the data observed at this interim time point
- Data Safety Monitoring Board notified Mesoblast that analysis was successful
- Interim analysis outcome is consistent with what has previously been demonstrated for the product used in this indication under both an expanded access protocol and earlier placebo-controlled trial



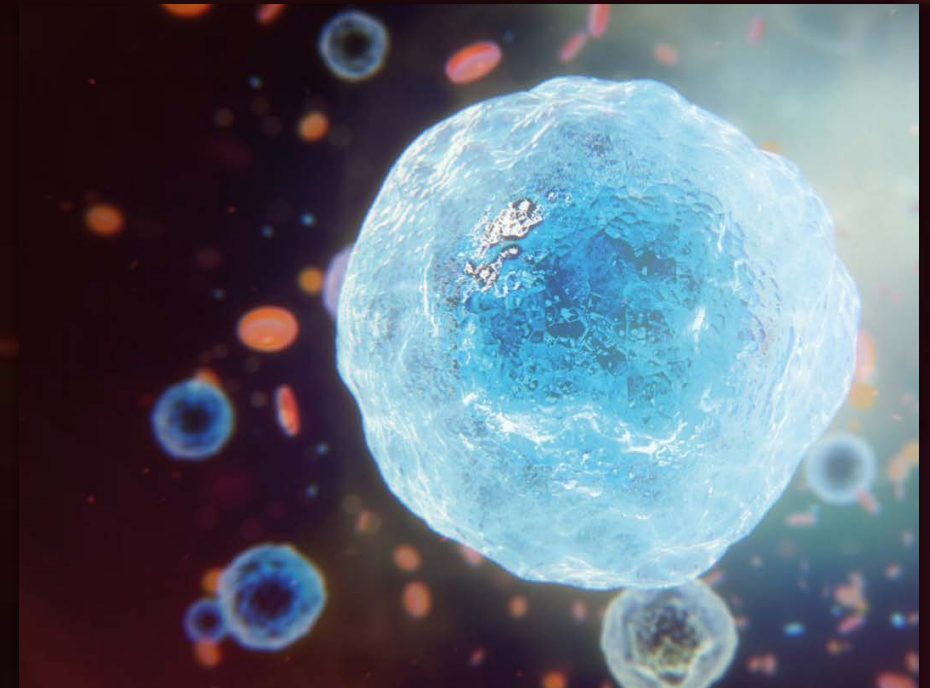
- Enrollment in the study is ongoing across multiple sites in the United States:
 - Completion is expected in mid-2017
 - Phase 3 data read-out (2H CY17)
 - Commercial launch activities are underway



Timelines

Upcoming Planned Milestones and Catalysts Over the Next 12 Months

- **MPC-150-IM**
 - *Phase 3 interim analysis for Class II/III (1Q CY17)*
 - *Phase 2B complete trial enrollment for Class IV (Mid-17)*
 - *Phase 2B data read-out Class IV (4Q CY17)*
- **MSC-100-IV**
 - *Phase 3 complete trial enrollment (mid CY17)*
 - *Phase 3 data read-out (4Q CY17)*
- **MPC-06-ID**
 - *Phase 3 complete trial enrollment (2H CY17)*
- **MPC-300-IV**
 - *12-Month data readout (3Q CY17)*
- **Potential corporate partnerships**



Thank you

