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the regenerative medicine company

Full Year Financial Results 2012

22 August 2012

Forward looking statements

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This presentation, including any comments made during or following the presentation, may contain forward-looking statements that are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. 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 Teva, Cephalon and Lonza 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. Actual results may differ from the results anticipated in these forward-looking statements, and the differences may be material and adverse. Factors 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.

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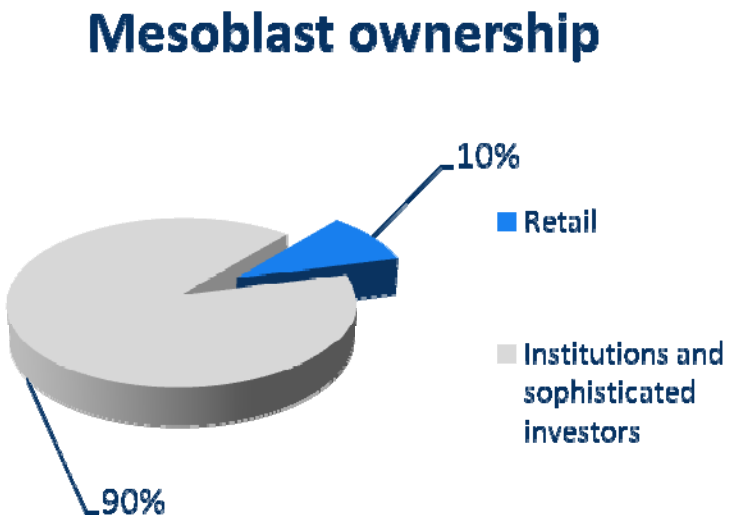
Financial Results Snapshot

Issued shares	286m
Current share price	$6.44
Market capitalization	$1,841M

Results	2012	2011
Total revenue & other income	**38.3M**	**120.9M**
Operating expenses		
R&D	36.9M	12.0M
Manufacturing	22M	3.4M
Management	28.1M	11.8M
Other	0.0M	1.5M
(Losses) / profit before tax	**(48.7M)**	**92.2M**
EPS basic – cents per share	(25.15)	41.79
EPS diluted – cents per share	(25.15)	39.78
Cash	**207M**	**263M**



This presentation is based on accounts which are in the process of being audited.

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Financial Results

Total revenue and other income	2012	2011
Revenue from continuing operations		
Commercialization revenue	27.7M	14.6M
Interest revenue	10.5M	4.7M
Other income		
Government grants	0.1M	-
Gain on revaluation of investment to fair value	-	86.7M
Share of losses of equity accounted associates written back on acquisition	-	14.9M
Total	**38.3M**	**120.9M**

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Major Accomplishments

Key highlights of the 2012 year were:

1.Long term follow-up for 60 patients in Phase 2 trial of congestive heart failure (CHF) identifying a MPC dose which prevented any episodes of heart failure hospitalization or death after 30 months

2.Together with Teva, meetings were held with FDA and EMA to discuss a proposed Phase 3 clinical trial protocol for CHF

3.Initiated a Phase 2 trial to prevent heart failure after a major heart attack, together with Teva, across multiple sites in Europe and Australia

4. Completed enrollment in the Phase 2 spinal fusion trials

5. Rapid enrollment in the Phase 2 trial for non-surgical treatment of degenerative disc disease

Major Accomplishments (continued)

6.Clinical and preclinical development of intravenous product formulation for a wide range of systemic diseases

- generated positive preclinical results in primate model of Type 2 diabetes
- commenced Phase 2 trial for Type 2 diabetes and its complications
- generated positive preclinical results in large animal model of inflammatory arthritis, showing concomitant effects on multiple pathways of joint inflammation
- preparations underway to initiate Phase 2 clinical program in rheumatoid arthritis

7. Implemented product manufacturing strategy to facilitate commercial scale-up, reduce costs, and provide capacity for commercial supply of product

A risk managed business model

- Proprietary platform technology delivers multi-product pipeline
  - multiple shots on goal
  - not dependent on success of any one product
- Corporate partnerships manage execution risk
  - Teva provides global distribution capability, regulatory and clinical trial expertise
  - Lonza provides global process development & manufacturing capability
  - Access to Singapore facilities alleviates need for internal spend on manufacturing facility
- Strong cash position enables simultaneous development of multiple products
  - Mesoblast has sufficient cash to advance new programs in parallel
  - investment in people with high-level expertise

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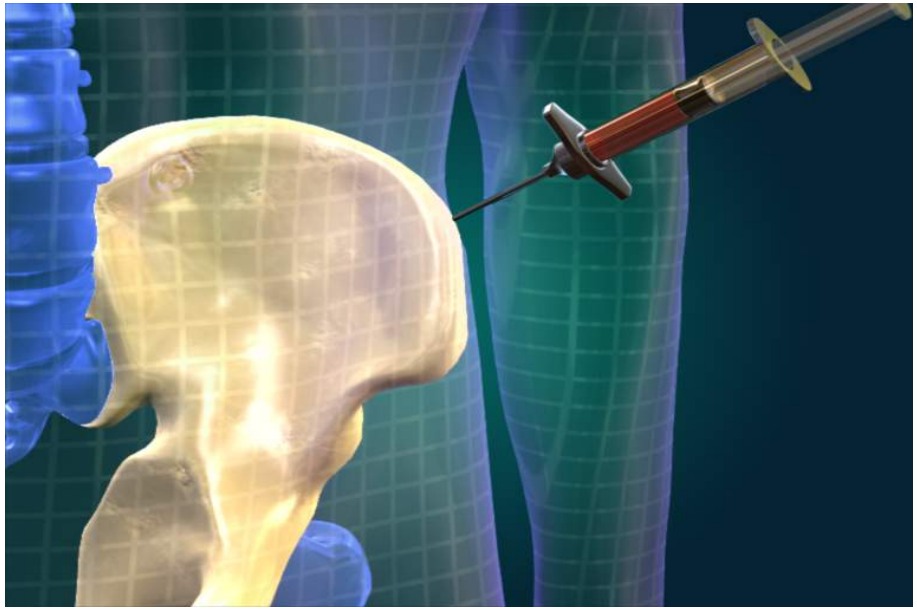
Technology



Our proprietary adult stem cells

- potent, purified adult mesenchymal precursor cells
  - strong safety profile
  - avoid ethical and safety issues
  - backed by strong patent position

- “off the shelf”
  - classic pharmaceutical drug model
  - batch to batch consistency
  - clear, rapid regulatory pathway

- easy to expand in large numbers
  - low cost of goods, no supply constraints
  - high margin business model

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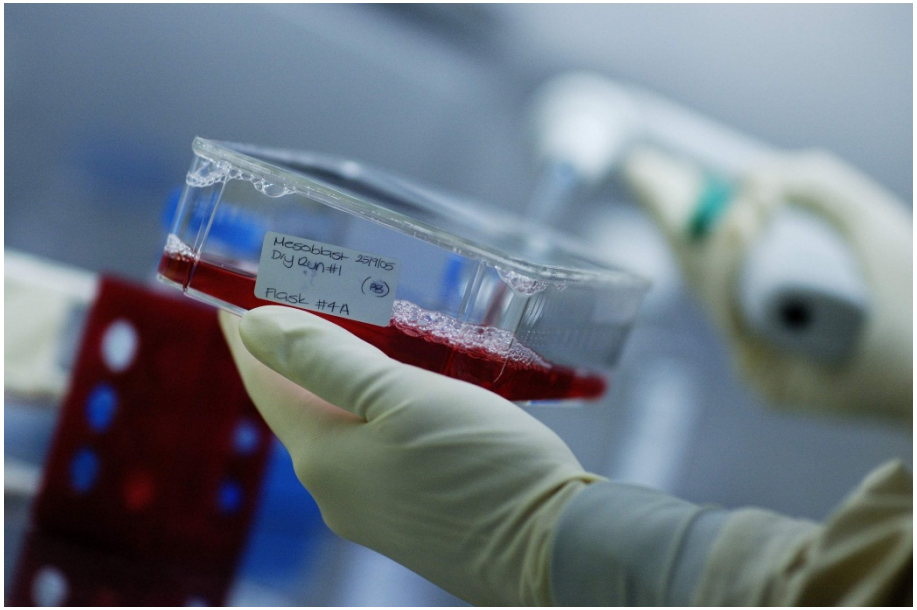
Product Pipeline



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Patented Platform Technology Delivers Multi-Product Pipeline

Intravenous products for diabetic and metabolic diseases

- Type 2 early diabetes
- Kidney/heart/liver complications

Intravenous products for inflammatory/immune mediated diseases

- Inflammatory joint diseases - Rheumatoid Arthritis
- Lung diseases - Asthma, Pulmonary Fibrosis

Cardiovascular products

- Congestive heart failure (CHF)
- Acute myocardial infarction (AMI)

Orthopedic products

- Intervertebral disc repair
- Spinal fusion – lumbar, cervical

Ophthalmic products

- Eye diseases – wet age-related macular degeneration

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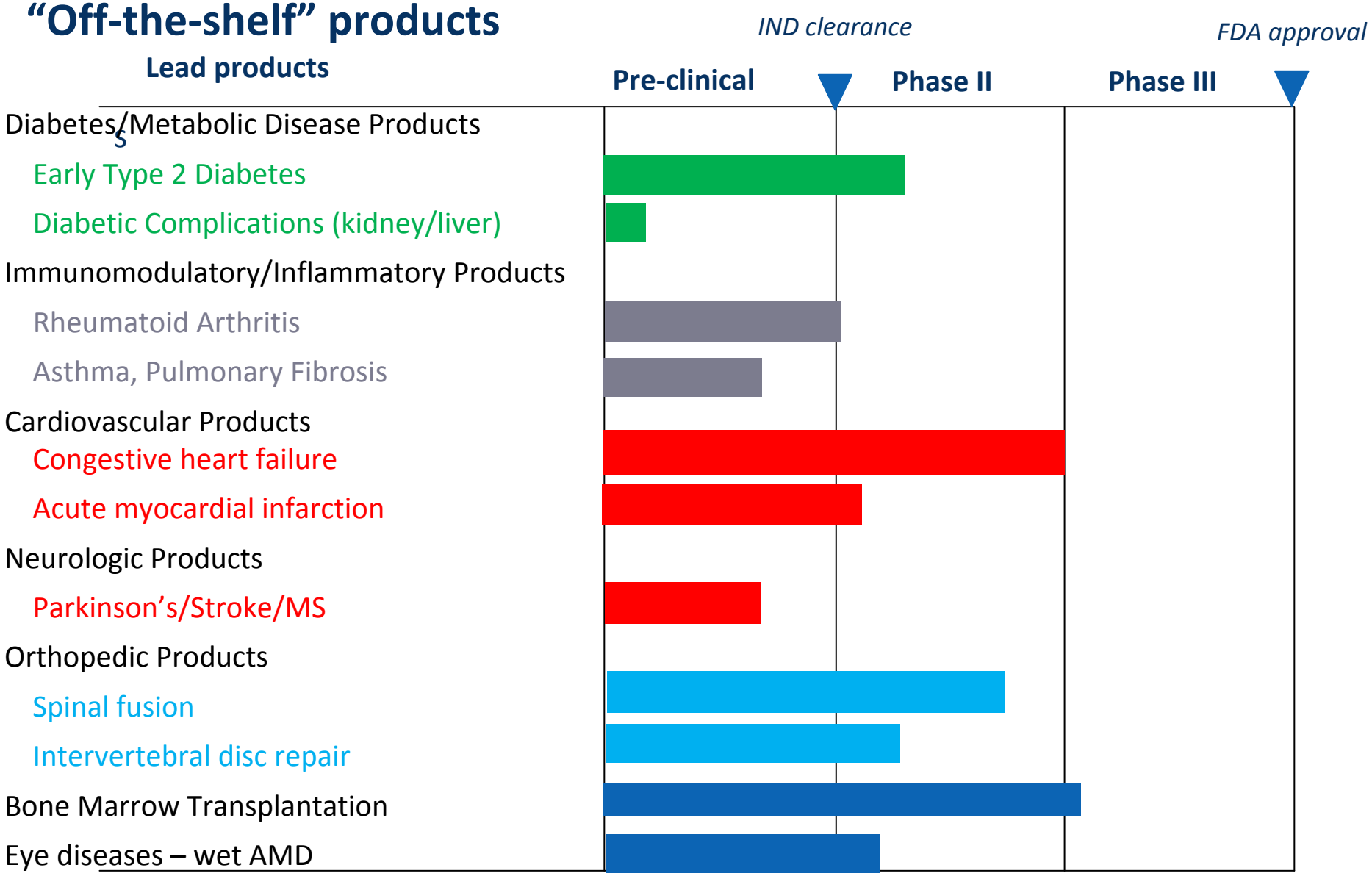
“Off-the-shelf” products



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Congestive heart failure Phase 3 program

> "In general, Phase 3 studies should use endpoints such as mortality and cardiovascular or heart failure hospitalizations, whereas endpoints, such as ejection fraction, that have not been validated as surrogates for clinical outcome are not considered to be acceptable as primary efficacy endpoints for pivotal trials.□
>
> *US FDA, Guidance for Industry, Cellular Therapy for Cardiac Disease October 2010*

- With Teva, end of Phase 2 meetings held with United States Food and Drug Administration (FDA) and European Medicines Agency (EMA)
- Alignment between regulatory agencies on Phase 3 trial design, primary endpoint, secondary endpoints
- Phase 2 trial results showed that highest MPC dose completely prevented any episodes of heart failure hospitalization or death for follow-up period of 30 months, compared with 25% event rate in controls
- Proposed Phase 3 trial for product approval should be powered for efficacy based on primary composite endpoint of heart failure hospitalization and mortality

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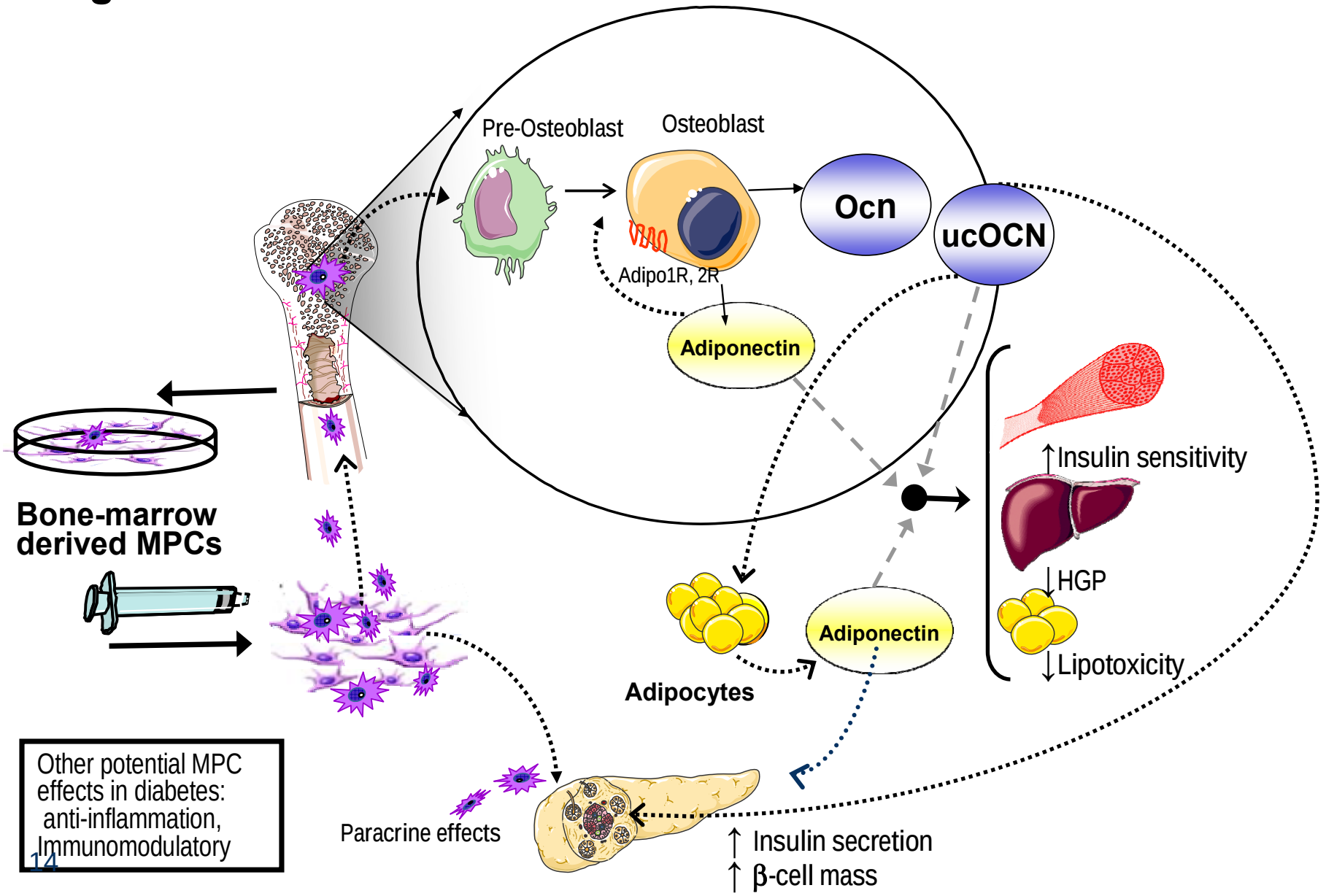
Integrated Metabolic Mechanisms of Action of MPCs



Conclusions From Preclinical Studies In Type 2 Diabetes

- Sustained 6-month durability of glucose lowering effect by single intravenous injection of allogeneic MPC at 0.3, 1 or 2 million MPC/kg;
- Accompanying sustained reductions in CRP levels suggest a potential cardioprotective effect of the MPC
- Repeat dosing was safe and resulted in parallel peaks and kinetics of Osteocalcin induction
- This was associated with normalization of fasting insulin levels and maintenance of low fasting blood glucose levels

- *Randomized, placebo-controlled Phase 2 trial in 60 patients with type 2 diabetes underway under FDA guidance*
- *Safety over 3 months primary endpoint, glucose control secondary endpoint*

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Rheumatoid Arthritis (RA)

- $10 billion global market, continues to grow
- Single agents targeting TNF-alpha or IL-6 moderately effective
- Single biologic agents require chronic use, associated with infectious complications
- Clear clinical need for novel, single use, remission inducing agents

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Conclusions From Preclinical Studies Of Inflammatory Arthritis

- Collagen-induced arthritis in sheep is good model for human RA
- Intravenously-injected allogeneic MPCs selectively migrated to inflamed joints/lymph nodes
- Single intravenous MPC injection significantly reduced synovial tissue levels of TNF-alpha, IL-6, IL-17, and inflammatory cell infiltration
- Single intravenous MPC dose significantly reduced histopathology severity score
- Dose-dependent efficacy

- *Planning randomized, placebo-controlled Phase 2 trials of MPCs for patients with RA as either first line treatment or rescue after failure with other biologics*
- *Evaluate safety, joint inflammation, functional capacity over 3-6 months*

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Near-Term Value Inflexion Points

- Continued focus on intravenous product franchise –

  completion of Phase 2 trial in early Type 2 diabetes
  commencement of Phase 2 trial in diabetic complications
  commencement of Phase 2 trials in rheumatoid arthritis

- Completion of Phase 2 spinal fusion trials
- Completion of Phase 2 degenerative disc disease study
- Commencement of Phase 3 trial for congestive heart failure
- Additional partnering opportunities – optimal timing

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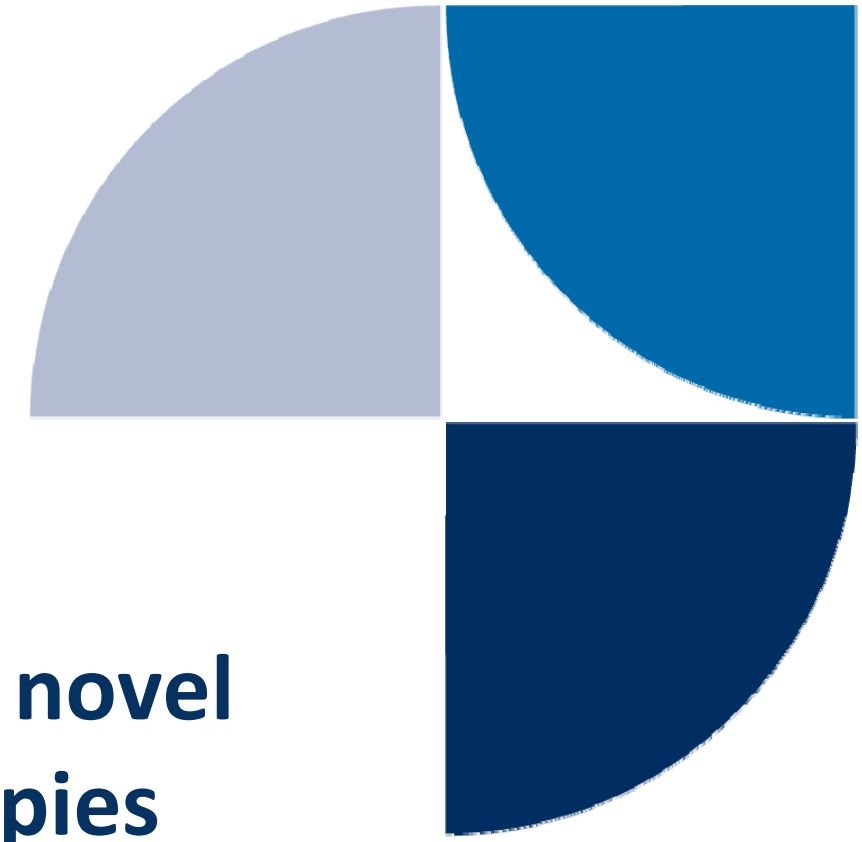

Leading the world in novel adult stem cell therapies