mesoblast the regenerative medicine company

Leading the world in novel adult stem cell therapies

Hong Kong 21 October 2010

"Regenerative medicine has become the most lucrative area of modern day medicine with an estimated global market value of \$500 billion."

- United States Department of Health

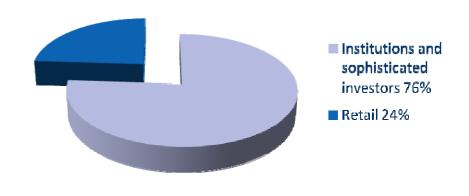


Investment snapshot

Issued shares	250m
Current share price	\$2.34
Cash available (approx)	\$41m
Market cap	\$585m

Capital raisings	\$m
IPO @ 50 cents	21.0
Equity placements	
Jul-06	17.4
Dec-07	13.4
Apr-09	10.8
May-10	37.0
Options & US raisings	18.2
Total funds raised	117.8

Mesoblast ownership





The Mesoblast value proposition – a sound technology base

1. The foundation is our dominant global IP position

- granted composition patents in major markets, including US
- backed by use and method applications

2. The key building blocks are our proprietary adult stem cells

- potent, purified adult mesenchymal precursor cells
 - strong safety profile no immune reactions
 - avoid issues associated with embryonic stem cells
- easy to expand in large numbers
 - low cost of goods, no supply constraints
- "off the shelf" just like classic pharmaceutical drugs
- •clear, rapid regulatory pathway just like devices



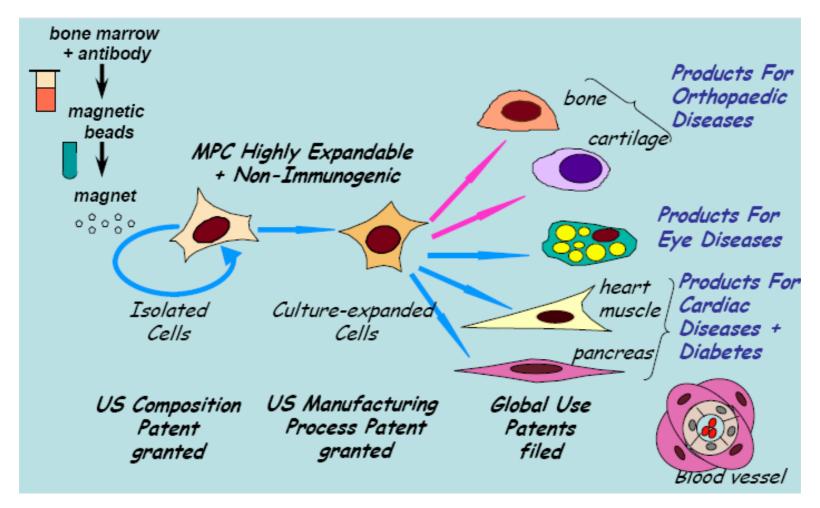
The Mesoblast value proposition – the right business model

3. The glue that binds it together is the right business model

- •multiple indications mitigate risk, drive revenues
- specific products for specific markets
 - maintain superior margins
- commercial opportunities drive the clinical program
- early mover advantage

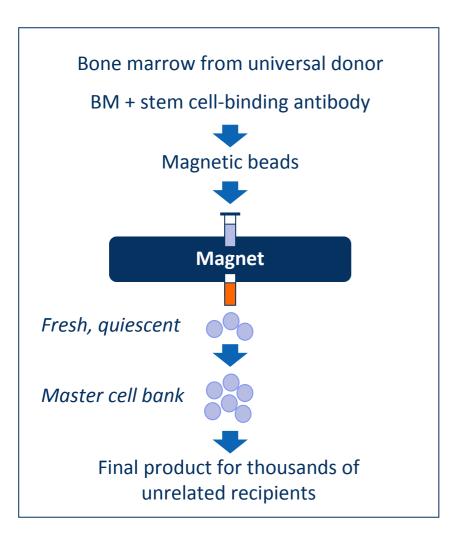


We own the intellectual property on Mesenchymal Precursor Cells (MPCs)





Our industrial scale manufacturing process



- Homogeneous cell population
- Well-controlled cell expansion
- Efficient large-scale expansion
- Lower costs of cell culture process
- Batch-to-batch consistency
- Stringent release criteria
- Greater potency of expanded product



Manufacturing strategy is central to maximising value

1. State-of-the-art manufacturing plant via strategic alliance

- cost neutral
- tax effective geographical location
- best of breed, cutting edge technology

2. Retain control of manufacture for all products

- product delineation for distribution partners
- maintain optimal product pricing differences

3. Commercial benefits

- reduced COGS, increased margins
- R&D support for new product pipelines
- leverage new technologies



Optimizing commercialization pathways

- 1. Taking individual applications to market on our own
- manageable marketing and distribution requirements
- 2. Broad-based partnering of platform technology
- complex distribution, global marketing reach
- 3. Partnering specific applications
- specialised distribution networks, companion products



Three-tiered approach to value creation

1. Near-term revenues

approved patient-specific products for elite athletes and high-net worth individuals

2. Mid-term value drivers underpinning capital growth

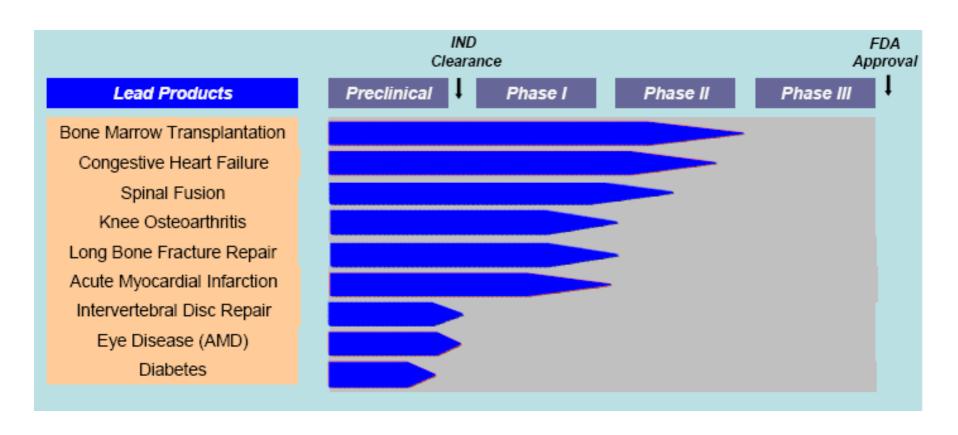
"off the shelf" products for major unmet medical needs

3. Long-term sustainability

R&D product pipeline



"Off-the-shelf" products advancing through the clinic





United States orthopedic markets

1. Spinal fusion

> 500,000 procedures each year

2. Intervertebral disc repair/regeneration

> 4 million patients affected

3. Repair of non-union long bone fractures

5-10% of all long bone fractures fail to unite (non-union)

4. Knee osteoarthritis

> 15 million patients affected



United States non-orthopedic markets

5. Cardiovascular diseases

- Congestive heart failure (CHF)
 - 6 million in US alone, > 600,000 new patients annually
- Acute myocardial infarction (AMI)
 - 1.2 million new patients annually

6. Bone marrow transplantation, expansion of umbilical cord blood

- Orphan drug designation (< 200,000 patients per annum)
- Fast-track approval, pricing premium
- Total number of procedures can be increased three-fold

7. Age-related macular degeneration (AMD) and diabetic retinopathy

> 150,000 new patients annually

8. Diabetes

> 200 million worldwide, 800,000 new US patients p.a.



Spinal fusion Phase 2 clinical trials

- "off the shelf" stem cells for minimally invasive lumbar and cervical fusion surgery
- 60 patients recruited across two FDA-cleared randomized, controlled trials
- multicenter design across US and Australian sites
- controls receive standard of care (interbody cage plus autograft or allograft bone)
- objectives are to show earlier fusion, and equivalence in sustained pain reduction by
 20% to baseline these are the end-points FDA expects for a pivotal trial



Minimally invasive posterior lumbar interbody fusion (PLIF)

- interim results of first 17 patients recently reviewed by Data Safety
 Monitoring Board
- 11 patients randomized to receive stem cells, 6 to receive bone autograft
- key points for patients receiving Mesoblast cells
 - no ectopic bone formation
 - no nerve impingement
 - at 3 months fusion success 90% with stem cells by radiography
 - supports previous studies showing earlier fusion
 - both autografts and MPCs resulted in pain reduction by >20% to baseline

Mesoblast's stem cells induce earlier fusion with equivalent pain reduction



Value inflexion points

- commencement of Phase 3 cord blood expansion trial for FDA approval
- successful completion of Phase 2 heart failure trial
 - progression to Phase 3 pivotal trial
- successful completion of orthopedic Phase 2 trials
- moving diabetes and eye diseases into Phase 2 clinical trials
- potential partnering opportunities optimal timing
- finalization of manufacturing strategic alliance

