

22 January 2010

Produced by: RBS Equities (Australia) Limited

Mesoblast

Analysis of MSB's opportunities

Buy

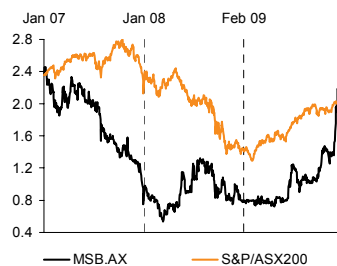
Target price
A\$2.08 (from A\$1.60)

Price
A\$1.99

Short term (0-60 days)
n/a

Price performance

	(1M)	(3M)	(12M)
Price (A\$)	1.35	1.05	0.81
Absolute (%)	47.4	88.6	145.7
Rel market (%)	41.5	89.1	75.2
Rel sector (%)	43.5	84.7	128.9



Market capitalisation
A\$266.10m (US\$242.97m)

Average (12M) daily turnover
A\$0.14m (US\$0.12m)

RIC: MSB.AX, MSB.AU
Priced A\$1.99 at close 22 Jan 2010.
Source: Bloomberg

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The potential market opportunities for MSB continue to expand with the growing number of positive results from clinical trials of its MPCs. We have developed a scenario analysis based on MSB's potential opportunity in the US market. This analysis suggests an NPV of A\$10.41 per share. Buy.

Key forecasts

	FY08A	FY09A	FY10F	FY11F	FY12F
EBITDA (A\$m)	-8.69	-10.0	-10.9	-12.4	1.52
Reported net profit (A\$m)	-10.1	-12.3	-13.2	-14.5	-1.65
Normalised net profit (A\$m) ¹	-10.1	-12.3	-13.2	-14.5	-1.65
Normalised EPS (c) ¹	-8.81	-9.89	-9.86	-9.86	-1.10 ▼
Normalised EPS growth (%)	7.45	12.30	-0.29	-0.03	-88.9
Dividend per share (c)	0.00	0.00	0.00	0.00	0.00
Dividend yield (%)	0.00	0.00	0.00	0.00	0.00
Normalised PE (x)	n/m	n/m	n/m	n/m	n/m
EV/EBITDA (x)	n/m	n/m	n/m	n/m	157.2
Price/net oper. CF (x)	-42.4	-28.8	-26.5 ▲	-25.6 ▲	111.6 ▼
ROIC (%)	-73.0	-58.5	-83.1	-140	6.85

Use of ▲ ▼ indicates that the line item has changed by at least 5%.

1. Pre non-recurring items and post preference dividends

Accounting standard: IFRS

Source: Company data, RBS forecasts

year to Jun, fully diluted

Potential market opportunities for MSB continue to expand

As positive clinical evidence from trials of MSB's mesenchymal precursor cells (MPCs) mounts up, we believe the potential market opportunities for the company continue to expand. MSB is undertaking clinical trials in congestive heart failure; type-II diabetes; osteoarthritis of the knee; bone-marrow regeneration; macular degeneration and diabetic retinopathy; spinal fusion; intervertebral-disc regeneration; and the repair of the non-union of bone fractures.

MSB's MPCs can become one of a number of tissue types

MPCs (also known as mesenchymal stem cells) are adult stem cells that have the ability to become tissues such as bone, heart muscle and cartilage. MSB's technology enables the extraction, isolation and scale-up of MPCs.

Scenario analysis suggests potential NPV of A\$10.41 per share for MSB

We have analysed the markets that MSB has targeted and we have developed a scenario analysis based on the company's potential US market opportunity (45% of global healthcare revenues). We assume MSB will ultimately achieve 5% share in each of the US markets corresponding to its potential applications, at an NPAT margin of 20%. On this basis, we foresee a potential NPV of A\$10.41ps for MSB from its current US opportunities.

Target price A\$2.08 (from A\$1.60), Buy recommendation unchanged

Our DCF-based valuation is unchanged at A\$1.60. However, as a result of this analysis, we have greater confidence in the potential upside for MSB's portfolio of opportunities. On an industry-wide basis, we believe the chance of getting a product to market from the Phase II stage are 20-30%. In developing our target price, we now use a 20% risk-weighting of our valuation of MSB's opportunities. Hence, we increase our target price to A\$2.08 (from A\$1.60). We believe MSB presents an opportunity for investors with a higher risk appetite.

Important disclosures can be found in the Disclosures Appendix.

Scenario analysis of MSB's opportunities

As clinical evidence regarding potential applications of MPCs mounts, the market opportunity for MSB continues to impress, in our view. We see significant upside potential for the use of MPCs in treating the following conditions:

- congestive heart failure;
- type-II diabetes;
- osteoarthritis of the knee;
- bone-marrow regeneration;
- age-related macular degeneration and diabetic retinopathy;
- spinal fusion;
- intervertebral-disc regeneration; and
- bone-fracture repair in non-union bone fractures.

In this report, we:

- analyse the markets that MSB has targeted, and then establish a scenario based on the apparent market opportunity for MPCs in the US; and
- summarise the potential upside for MSB and its sister company, Angioblast.

Summary

In valuing these market opportunities, we assume MSB will get its product to market within the timeframes listed below. We further assume the company will ultimately achieve 5% market share in the US market, and that this remains constant. On this basis, we calculate that the NPV of the potential opportunities developed by MSB is A\$10.41. This is shown in the following table.

Further analysis suggests that if MSB can generate market share of 10% and a margin of 30%, then the total upside potential is A\$28.84 per share.

Table 1 : MSB – NPV of potential market opportunity

Market opportunity	Estimated year of market entry	NPV per share (A\$)
Cardiac	2013	0.99
Diabetes	2016	3.29
OA of the knee	2016	0.74
Bone marrow regen	2013	0.67
Macular degeneration	2016	0.42
Spinal Fusion	2016	0.68
Disc regeneration	2016	0.23
Bone repair	2013	3.40
	Total value	10.41

Source: RBS estimates, PubMed

What are MPCs?

Mesenchymal precursor cells (MPCs – also known as mesenchymal stem cells) are adult stem cells that have the ability to become solid organs and tissues such as bone, heart muscle and cartilage. They do not have immunological markers and will therefore cause no immune reaction when injected into a foreign host. This means MPCs can be harvested as a generic product for any recipient from any donor. The proprietary technology being commercialised by MSB enables the efficient extraction, isolation and scale-up of MPCs. This technology has allowed for the potential application of commercial, off-the-shelf MPCs harvested from relatively few, non-specific donors in a wide range of serious medical issues.

We analyse briefly each applicable condition, the medical application of MPCs and, finally, the potential market size and upside for MSB.

1. Congestive heart failure

Congestive heart failure (CHF) is a chronic condition characterised by the heart's inability to pump blood effectively to the body, resulting in shortness of breath, tiredness, potential organ damage and, ultimately, death. It usually occurs as a result of damaged heart tissue lost in, and progressively after, a heart attack, due to the sharp and then progressively increasing lack of blood flow and overworking of the weakened heart. This can be quantified as a measure of the ejection fraction (the percentage of blood ejected from the heart) via echocardiogram. An ejection fraction (EF) of 40% or less defines moderate to severe CHF. A heart considered healthy gives an EF range of 55-65%.

Almost 50% of heart attack victims go on to develop heart failure within six years. There are around 5m CHF sufferers in the US alone and a further 550,000 new cases each year stemming from 1.25m new heart attacks. Current drug treatment of CHF does not regenerate heart muscle or tissue, but rather seeks to alleviate symptoms and reduce heart stress to prolong what is otherwise inevitable heart-function deterioration.

MSB application – rebuilding heart muscle

MSB's partner, Angioblast, is developing an MPC product called Ravascor, capable of rebuilding damaged heart tissue. Angioblast's product is expected to induce both the formation of new small arteries that will supply more blood to damaged heart muscle, as well as the direct formation of new heart muscle itself. MPCs are likely to be delivered either by direct injection to the heart or through the surgical placement of a biocompatible patch in conjunction with existing drug therapies.

Currently in Phase II trials designed to validate the safety of the product, early indications of its efficacy are promising. Six-month results for trials involving patients with moderate to severe CHF (EF less than 40%) show an increase in mean EF by 22% for patients injected with the lowest dosage of Ravascor compared to a mean decrease of 18% for the control group. There have been no cell-related adverse events and overall observed improvements are two-fold higher than any other existing device therapies (improvements measured on top of normal medical standard of care). The application of the cells was done by direct injection into the heart using local anaesthetic on conscious patients. Patients were released within 24 hours of the procedure.

Large potential market

Heart failure is a large economic and health burden estimated to cost the US US\$35bn per year, with US\$18.8bn taken up by hospital visits and US\$3.1bn by medical durables. Given early results, Angioblast believes the injection of its MPC product shortly after a heart attack has the potential to become a routine procedure to prevent the complications of heart failure and improve life quality. This applies to around 900,000 non-fatal heart attacks occurring in the US annually, coupled with potential treatment for the 5m or so patients already suffering from CHF. We believe this potential will be viable if the product's efficacy remains on par with early trials, given the significant potential gains in life quality, morbidity rates and long-term treatment costs. Worldwide application provides further upside opportunity, with about 18m non-fatal heart attacks occurring globally each year.

Valuation, variables and assumptions

In valuing this market opportunity we assume Angioblast will achieve 5% market share of the US\$3.1bn spent annually in the US on medical durables for CHF. For the purpose of this analysis we set revenue growth at 4.5% and the NPAT margin at 20%, in line with medical industry averages. We set the NPV relating to MSB for this opportunity at 38.4% of Angioblasts' (MSB owns 38.4% of Angioblast). We consider this to be a fairly conservative estimate given the total global potential upside. In line with MSB's clinical trials, we assume entry to market in 2013. This generates an NPV per share for MSB of A\$0.99 (Angioblast A\$2.58).

Market entry: 2013
NPV per share: MSB A\$0.99
(Angioblast A\$2.58)

Table 2 : MSB – cardiac NPV per share for varying market shares

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.21	0.99	1.92	2.85	3.78

Source: RBS estimates, PubMed

2. Type-II diabetes

Type-II diabetes is a major worldwide health issue affecting around 210m people in the western world and around 24m in the US alone. The number of cases has been growing at around 6.5% per year, reflecting increasing obesity rates. Type-II diabetes occurs initially as a result of the body's ineffective use of insulin due to prolonged exposure to excess blood sugar levels. This deteriorates the cells' ability to properly store glucose and react with the insulin, leading to an increased insulin requirement and thus to excess stress on the insulin-producing pancreas. This stress eventually leads to progressive damage and a gradual decline in the pancreas' functional ability. If left to progress unabated, this degraded functional ability can cause numerous complications such as heart disease, kidney failure, blindness, nerve damage and, ultimately, death.

Type-II diabetes is mainly considered a lifestyle disease, with obesity and inactivity being the primary causes in most cases (genetics and age normally play a secondary role). Hence, most early cases can be treated through lifestyle changes. Later progression requires the use of drugs and, ultimately, insulin injections. These are ideally avoided as the risks of rapid hypoglycaemia (very low blood sugar levels) can be high. As a result, there is a market for developing a product that can boost the pancreas' ability to create insulin and control glucose levels naturally as an aid to treatment through positive lifestyle changes.

MSB application

MSB's sister company, Angioblast, is developing a product that uses MPCs to naturally enhance the ability of the pancreatic beta cells to produce more insulin. The product is in the early stages of development and is unlikely to become viable for at least four more years. The pre-clinical trials on mice show promising early results with no complications. Of 35 mice, those treated with MPC injections showed a two-fold increase in their pancreatic islet cells relative to the controls, resulting in a 29% higher insulin-producing to glucagon-producing cell ratio, a 34% increase in blood insulin levels and a 35% decrease in blood sugar levels. No subjects' reduction in blood sugar went below normal healthy levels, indicating a lower risk of hypoglycaemia compared to insulin-injection treatment.

Market potential

In 2007, US\$116bn was spent on direct medical costs related to diabetes in the US; US\$27bn for care to directly treat diabetes and US\$58bn to treat diabetes-related complications. Expenditure on diabetic medications directly is about US\$13bn and per-patient expenditure is estimated by PubMed at US\$11,744 annually. Clearly there is a large economic burden and market for diabetes treatment. MSB's potential product is likely to be most applicable to patients with an already moderate progression of the disease, namely those already taking insulin. Type-II diabetes patients have the option of taking either oral medication only, insulin only, both oral and insulin medication, or nothing at all. As it stands about 20% take either insulin only or insulin and oral medication. The other 80% is split 60:20 between oral medication only and nothing. Using these assumptions we estimate there are around 4.8m people in the US who may benefit significantly from MPC injection. Depending on the efficacy of the treatment we see strong potential for MSB's product to have an application in patients in earlier stages of type-II diabetes as an aid to the progress made through lifestyle changes, or to avoid the ongoing costs of oral medication.

Valuation and assumptions

In valuing this market opportunity we assume Angioblast will achieve 5% market share of the US\$13bn spent annually on diabetic medications in the US. For the purpose of this analysis we set revenue growth at 4.5%, in line with the medical industry average. We set the NPV relating to MSB for this opportunity at 38.4% of Angioblasts'. We consider this assessment conservative given the total global potential upside for this product. In line with MSB's clinical trials, we assume entry to market in 2016. This generates an NPV per share for MSB of A\$3.29 (Angioblast A\$8.56).

Market entry: 2016
NPV per share: MSB A\$3.29
(Angioblast A\$8.56)

Table 3 : MSB – diabetes NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.70	3.29	6.32	9.35	12.39

Source: RBS estimates, PubMed

3. Osteoarthritis of the knee

Osteoarthritis (OA) of the knee is the most common form of OA and disability in the US, affecting between 10m and 15m people. It typically occurs with old age, but obesity, joint injury, muscle weakness, heredity and other forms of arthritis are also contributing risk factors. It results from the gradual loss of cartilage that cushions the ends of the bones at the knee, leading to bone-on-bone grinding and, ultimately, to pain and loss of movement. Current treatments serve only to alleviate the pain and reduce inflammation, but are unable to restore cartilage. As a result, the cartilage degradation inevitably continues over time to the point where expensive joint replacement becomes the only real option for restoring function and fully alleviating pain symptoms.

MSB application

MSB intends to offer a product that applies MPCs to the target area via knee arthroscopic surgery in the hope of growing back cartilage. The initial target market is for patients with chronic osteoarthritis or those who require arthroscopic surgery for acute cartilage tears. Arthroscopic knee surgery is a form of surgery applied predominantly to acute cartilage tears and we believe it would be an accurate method for MPC delivery to the knee. Pre-clinical trials undertaken in ewes suffering from knee OA showed as much as a 20-25% increase in the thickness and area of cartilage in the knee compared to the controls at both three and six months. Again, there were no adverse side effects. As a result of this, MSB is performing Phase II trials.

Market potential

The early indications of this trial suggest the product will have broad OA applications. OA costs the US US\$185.5bn a year at US\$4,500 per patient. We believe the knee market that MSB is targeting would account for much of this. More than 10m Americans suffer from knee OA, with 200,000 new cases presenting each year. We expect patients at the most advanced stages of knee OA (requiring, or close to requiring a knee replacement) to be the major target market for MSB as we believe the proposed procedure would be preferable if proven effective. In 2006 about 581,000 knee-replacement surgeries were undertaken in the US at a cost of US\$20,000-45,000 each. This equates to a total expenditure of around US\$15bn. The specific market for stimulation in repairing articular cartilage in the US was valued at US\$980m in 2004 by PubMed. If MSB's product can significantly improve knee function in a simple and relatively cheap procedure that avoids a patient's future need for a knee replacement, then we believe the company could gain a significant portion of this market.

Valuation and assumptions

In valuing this opportunity we assume MSB will achieve 5% market share of the US\$980m US stimulation for articular cartilage repair market. We assume a growth rate of 4.5% and an NPAT margin of 20%, in line with industry averages. We consider this conservative relative to the global opportunity should the treatment prove to be effective. In line with MSB's trials, we assume entry to market in 2016. This generates an NPV per share for MSB of A\$0.74.

Market entry: 2016
NPV per share: MSB A\$0.74

Table 4 : MSB – knee OA NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.16	0.74	1.42	2.09	2.77

Source: RBS estimates, PubMed

4. Bone-marrow regeneration

Bone-marrow regeneration through bone marrow or cord blood transplants is usually a last resort for critically ill patients suffering from cancers or diseases associated with their immune system (such as leukaemia). The purpose of the process is to destroy a problematic immune system and then regrow a new healthy one by transplanting healthy blood-forming stem cells found in bone marrow or cord blood. Transplants may be made either with the patient's own cells (autologous) or with those of a donor (allogeneic). Transplants using a patient's own cells create a high risk of cancer or disease relapse. Transplants using unrelated donors have a high risk of graft-versus-host disease (where the donor's immune system recognises the recipient as foreign and mounts an immunologic attack) and require significant immunosuppressive medications. Further complications can come from difficulty in finding the perfect tissue match required for allogeneic bone-marrow transplants (donor matching is moderately easier with cord blood). Its application has thus been limited due to the high risk of fatal complications and the potential difficulties in finding donor matches.

MSB's application

MSB targets 40-fold expansion of proprietary stem cells from cord blood. Cord blood's major limitation when considered as an alternative to bone-marrow transplantation is the small size of the cord blood source. As a result of the smaller stem-cell count, successful transplants are less likely and the recovery of normal immune function is slower. For this reason it has mainly been seen as an alternative to bone-marrow use only if a proper bone-marrow-donor match cannot be found given the increased donor match likelihood. Based on early trials, MSB's ability to expand the original stem-cell pool from the cord blood increases the transplant success rate and the rate of recovery, and reduces the chance of graft-versus-host disease. This makes cord blood potentially preferable to bone marrow as a transplant agent. Considering the small market, MSB has been given orphan-drug status, allowing for an accelerated review process by the FDA, seven-year market exclusivity upon authorisation, tax benefits and exemption from user fees.

Market size and potential

The market is relatively small for this product, with only 20,000 bone-marrow transplants per year in the US and 40,000 worldwide. Although few in number, bone-marrow transplants are very expensive procedures, with total prices ranging from US\$50,000 to US\$100,000 for the autologous types and from US\$150,000 to US\$200,000 for the allogeneic types in the US. This equates to an annual expenditure of around US\$2bn. Cord-blood transplants are still in their infancy, so far totalling just 8,000 worldwide, but they are finding greater appeal as experience grows. MSB's product will only help to increase this appeal, in our view.

Growth rates for this product depend heavily on its efficacy. If useful, it will likely see significant growth given around 75% of patients who need a bone-marrow or cord-blood transplant do not receive one because of the associated issues. If this product results in no significant improvement, its growth is likely to remain steady.

Valuation and assumptions

In valuing this opportunity we assume Angioblast will achieve 5% share of the US\$2bn spent annually on transplant procedures in the US. We assume a growth rate of 4.5% and an NPAT margin of 20%, in line with the industry average. We calculate an NPV relating to MSB for this opportunity at 38% of Angioblasts'. We think this assessment is probably on par with true product potential and is not highly conservative. In line with MSB's clinical trials, we assume entry to market in 2013. This generates an NPV per share for MSB A\$0.67.

Market entry: 2013
NPV per share: MSB A\$0.67
(Angioblast A\$1.74)

Table 5 : MSB – Bone marrow NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.14	0.67	1.30	1.92	2.55

Source: RBS estimates, PubMed

5. Age-related macular degeneration and diabetic retinopathy

Age-related macular degeneration (AMD) and diabetic retinopathy are both conditions of the eye that can lead to significant central vision loss. AMD develops with old age and is the leading cause of vision loss and blindness for Americans over the age of 65. It is characterised by the degeneration of the macular or sharp central vision area of the retina, and comes in both a dry and a wet form. The dry form of AMD is the less severe early stage of the disease, whereby thinning and pigment deposits of and on the macular tissue results in some vision loss. Around 10% of dry AMD cases progress to wet AMD, the more debilitating form of the disease. In wet AMD, new blood vessels grow beneath the retina and leak blood and fluid that damage and destroy retinal cells. It occurs as a result of the bodies' misguided attempt to set up new blood vessels for increased nutrient and oxygen supply to the struggling macular area. Diabetic retinopathy is similar to wet AMD in that damage is caused by leakage of blood vessels that form at the back of the eye. This leakage occurs as a result of a weekend blood-retinal barrier caused by diabetes.

MSB application

The current standard-of-care therapy for treating abnormal blood vessels in the back of the eye involves eye injections using an anti-VEGF agent every four to six weeks. This is an expensive technique costing around US\$2,000 per treatment for the lead product Lucentis, produced by Genentech in the US. Pre-clinical trials done in association with Angioblast on primates show that a single injection of its off-the-shelf MPC cells is as effective as Lucentis in reducing blood-vessel

leakage. There was a significantly superior outcome when the MPCs were used in conjunction with Lucentis compared with the outcome from using Lucentis alone.

Market opportunity

Around 1.5m people in the US suffer from wet AMD and around 200,000 new cases are diagnosed every year. There are a further 500,000 or so diabetics suffering from retinopathy caused by leaky blood vessels. This creates a potential market pool of around 2m patients. In FY08, sales revenue for Genentech's Lucentis reached US\$875m, a 7% increase over FY07 and estimated by PubMed to account for around 50% market share. Interestingly, Genentech's main competitor in this market is another one of its own products, Avastin. Avastin's intended use is in the treatment of cancer, but it has seen significant uptake as a cheaper alternative to Lucentis, giving similar results for 1/40th of the price.

Ultimately we believe the uptake of the MPC product will be defined by its ability to reduce either overall costs or the number of treatments per year. If proven significantly affective in either respect, the market potential would be large, in our view.

Valuation and assumptions

In valuing this opportunity we assume Angioblast will achieve 5% share of the US\$1.75bn total market opportunity inferred from the US\$875m Lucentis 50% share. We assume a standard 4.5% growth rate and a 20% NPAT margin, in line with industry averages. The NPV relating to MSB for this opportunity was set at 38.4% of Angioblasts'. We consider this to be relatively conservative compared to the full global market potential. In line with MSB's clinical trials, we assume entry to market in 2016. This generates an NPV per share for MSB of A\$0.42 (Angioblast A\$1.09).

Market entry: 2016
NPV per share: MSB A\$0.42
(Angioblast A\$1.09)

Table 6 : MSB – macular degeneration NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share	0.09	0.42	0.81	1.19	1.58

Source: RBS estimates, PubMed

6. Spinal fusion

Spinal fusion is a surgical procedure used to stabilise the spine through the fusion of two or more vertebrae using bone grafts or BMP (a bone growth agent), metal rods and screws. The purpose is to alleviate symptoms and problems created by spinal injuries, the degeneration or protrusion of the cushioning disks between the vertebrae, weak spines or abnormal spine curvatures. Spinal fusion eliminates relative motion between the fused vertebrae, and consequently results in a more stable, albeit stiffer, spine. The process is commonly achieved by first placing small pieces of bone, taken from the patient's own hip or pelvis, between the vertebrae to be fused to promote fusion (bone graft). The vertebrae are then held together by metal rods and screws to allow the fusion to progress. More recently, the use of bone morphogenetic protein (BMP) to promote fusion with, or instead of, bone pieces has become increasingly popular. BMP is a naturally occurring human protein that stimulates the body to grow new bone and has shown fusion rates equivalent to or better than traditional bone grafts. Its use has seen a significant uptake since its FDA approval. Its good efficacy has been overshadowed in recent times by concerns regarding its use in cervical spine fusions.

MSB application

MSB's MPC product for this application, called Neofuse, has similar potential application to the current use of BMP as a substitute fusion agent over bone or bone substitute. Pre-clinical trials on ewes for cervical spine fusions showed the MPC injections had a significantly higher rate of bone fusion (75%) after three months than autologous or substitute bone grafts (17% and 33%, respectively) with no adverse cell-related events. Pre-clinical trials on humans suggest a lower-than-expected dose of Neofuse gives equivalent positive results. If this fact is repeated in clinical trials, it would indicate greater potential profit margins for the end product. MSB is in Phase II trials, with results expected in mid-late 2010.

Market potential

Spinal fusion surgery is a growing market, with around 500,000 annual procedures expected to be undertaken in 2010 in the US, and a subsequent annual growth rate of between 10% and 20% thereafter. In July 2008, the FDA issued a formal public health notification concerning the use of BMP in cervical fusions due to higher-than-acceptable complication rates. Until BMP is proven safe, the FDA recommends the use of approved alternatives. Cervical spinal fusions account for

up to 40% of all spinal-fusion procedures, so we believe the FDA's action is a significant opportunity for MSB to prove itself the only true product competitor.

In 2006, 25% of all spinal-fusion procedures involved BMP growth agents at a cost varying between US\$2,500 and US\$20,000 per procedure. For FY09 we estimate the US market value for BMP growth agent in spinal fusions was about US\$1.1bn. MSB could see a significant portion of this market if it proves its product is either as safe and effective for cervical spinal fusions, or more effective and/or cheaper for spinal fusions at large. At this early stage it is difficult to identify the scope of this potential due to the lack of trials. Given the nature of MPCs is similar to that of BMP for this purpose, we believe there is a good chance that MPCs may be as effective as BMP.

Valuation and assumptions

In valuing this opportunity we assume MSB will achieve 5% share of the US\$1.1bn BMP market. Despite larger forecasts, we also conservatively maintain a 4.5% annual growth rate and a 20% NPAT margin, in line with the industry average. We consider this moderately conservative given the full global product potential. In line with MSB's clinical trials, we assume entry to market in 2016. This generates an NPV per share for MSB of A\$0.68.

Market entry: 2016
NPV per share: MSB A\$0.68

Table 7 : MSB – spinal fusion NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.14	0.68	1.30	1.93	2.56

Source: RBS estimates, PubMed

7. Intervertebral-disc regeneration

Degeneration of the intervertebral disc, also known as degenerative disc disease (DDD), is a common condition that occurs naturally with age. Intervertebral discs are the pillow-like cushions between the spinal vertebrae that allow their slight relative movement and aid in shock absorption. Natural daily wear and tear slowly degrade these discs over time, such that clinical signs of DDD coming with age are almost inevitable. Of the 50 year olds in the US, 85% show signs of DDD, but most are asymptomatic. Severe degeneration, suffered by around 1m Americans, can lead to spinal fusions (less than 20%) and severe chronic back pain. There is no treatment to rebuild these discs, with spinal fusion or disc replacement the only real treatment options for advanced cases.

MSB's application

MSB is developing a treatment option through the injection of its off-the-shelf stem cells to rebuild degenerated discs, alleviating the problems associated with DDD. Pre-clinical trials on 36 sheep using a mix of placebo controls and single low-dose intra-discal injections of MPCs showed highly efficacious results. In short, there was a dramatic reversal of the degenerative process, regrowth of disc cartilage and sustained normalisation of disc pathology, anatomy and function for sheep injected with MSB's cells. Six months after the single injection, discs that were originally severely damaged and degenerated were found to have become indistinguishable from healthy non-degenerated discs. By comparison, the sheep injected with hyaluronic acid (used to treat DDD inflammation and reduce pain symptoms) or with nothing at all continued to show reduced disc height, reduced cartilage content and disrupted histopathology.

Market opportunity

Given the apparent efficacy of MSB's intended product and the lack of any direct competitor, we see significant potential for MSB in this market. Around 20-25% of Americans suffer from DDD in some form, with about 1m advanced cases and a further 3m-plus cases of intervertebral-disc related back pain diagnosed each year. Disc regrowth would most likely be a preferred option to spinal fusion or disc replacement given the procedure is considerably less complex, potentially more cost effective and results in the re-establishment of natural body function. Disc regrowth has further strong potential as a treatment option for most moderate to severe cases of DDD. This equates to a market size of more than 1m patients in the US alone. The US replacement-disc market was estimated by PubMed to be worth US\$55m in 2007, with an expected growth rate of more than 20%. PubMed also estimated the global spinal non-fusion technology market at US\$400m in 2008, with an expected growth rate of 38%.

Market entry: 2016
 NPV per share: MSB A\$0.23

Valuation and assumptions

In valuing this opportunity we assume MSB will achieve a 5% share of the US spinal nonfusion technology market, which we conservatively value at US\$448m for 2013. Despite the high expected growth rate, we retain the 4.5% industry average and a 20% NPAT margin. This may be conservative for this market but, considering its growth, would most likely coincide with a drop in spinal fusions. In line with MSB's clinical trials, we assume entry to market in 2016. This generates an NPV per share for MSB of A\$0.23.

Table 8 : MSB – disc regeneration NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.05	0.23	0.44	0.64	0.85

Source: RBS estimates, PubMed

8. Bone fracture repair for non-healing bones

Bone fractures are simply breaks in a bone due to excess applied forces. Non-healing bones are cases where the initial fracture is so severe that proper healing to normal weight-bearing or volume capacity is not achieved in the natural recovery process. This is particularly common in severe fractures on long bones, such as those commonly seen in road traumas. Tens of millions of people worldwide suffer from the issue. General healing difficulties for bone fractures also occur in more than 1m of the 5.6m fractures that happen annually in the US.

MSB application

MSB intends to market a product that uses its proprietary stem cells to aid healing in slow or non-healing fractures. An early trial on 11 patients with non-healing long bone fractures in their legs showed promising results. Of the 11 patients operated on using MSB's MPCs, eight achieved complete bone union after 12 months (median time to union was four months) and another had union for one of their two fractures. The remaining two patients had complex road-trauma fractures requiring reoperation. The median period of non-united fracture experienced prior to operation on the successful participants was 10 months, with a maximum of 41. Even if the product does not guarantee bone union, early signs clearly indicate an ability to dramatically improve the bone-repair process. However, the trial results are limited given the lack of controls.

Market potential

Each year around 1m bone-fracture patients in the US suffer from healing difficulties and tens of millions of people worldwide suffering from non-united long bone fractures. The market for aiding bone growth is large, with a US\$500m market for bone stimulation alone in the US. BMP serves as a direct competitor in this market with a product that provides the same function from an end-user perspective and has proven clinical effectiveness. Greater market uptake of BMP has been hindered by its heavy price tag, around US\$5,000 per treatment. While an expensive up-front cost, clinical evidence suggests it may be cost saving in the long run in the treatment of complex or persistent long bone non-union. We also believe these prices might drop as market competition in manufacturing BMP has stepped up since the original patents protecting its production exclusivity for US pharmaceutical maker Wyeth ran out last year. The entire market for BMPs in the US is estimated by PubMed at US\$5.3bn. If MSB's product could achieve similar or better results at a lower price, then it should be able to mount a serious challenge to BMP in the future.

Valuation and assumptions

In valuing this opportunity we assume MSB will achieve a 5% share of the remaining US\$4.18bn BMP market that does not cover spinal fusions. We assume the NPAT margin and revenue growth rate at 20% and 4.5%, respectively, in line with medical industry averages. We consider this to be moderately conservative if MPCs provide a significant functional edge over BMP. In line with MSB's clinical trials, we assume entry to market in 2013. This generates an NPV per share for MSB of A\$3.40.

Table 9 : MSB – fracture repair NPV per share for varying market share

Market share	1%	5%	10%	15%	20%
NPV per share (A\$)	0.70	3.40	6.46	9.51	12.57

Source: RBS estimates, PubMed

Market entry: 2013
 NPV per share: MSB A\$3.40

9. Total opportunity summary

In valuing these market opportunities, we assume MSB will get its product to market within the timeframes listed below. We further assume MSB will ultimately achieve 5% market share in the US market, and that this remains constant. On this basis, we believe the NPV of the potential opportunities developed by MSB is A\$10.41.

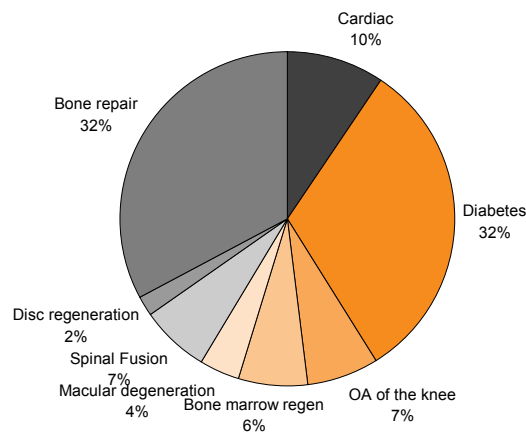
Table 10 : Summary of opportunity

Market opportunity	Estimated year of market entry	NPV per share (A\$)
Cardiac	2013	0.99
Diabetes	2016	3.29
OA of the knee	2016	0.74
Bone marrow regen	2013	0.67
Macular degeneration	2016	0.42
Spinal Fusion	2016	0.68
Disc regeneration	2016	0.23
Bone repair	2013	3.40
Total value		10.41

Source: RBS estimates, PubMed

The distribution of NPVs for MSB's opportunities is shown in the chart that follows. We see the largest opportunities in bone repair and diabetes.

Chart 1 : Distribution of NPV

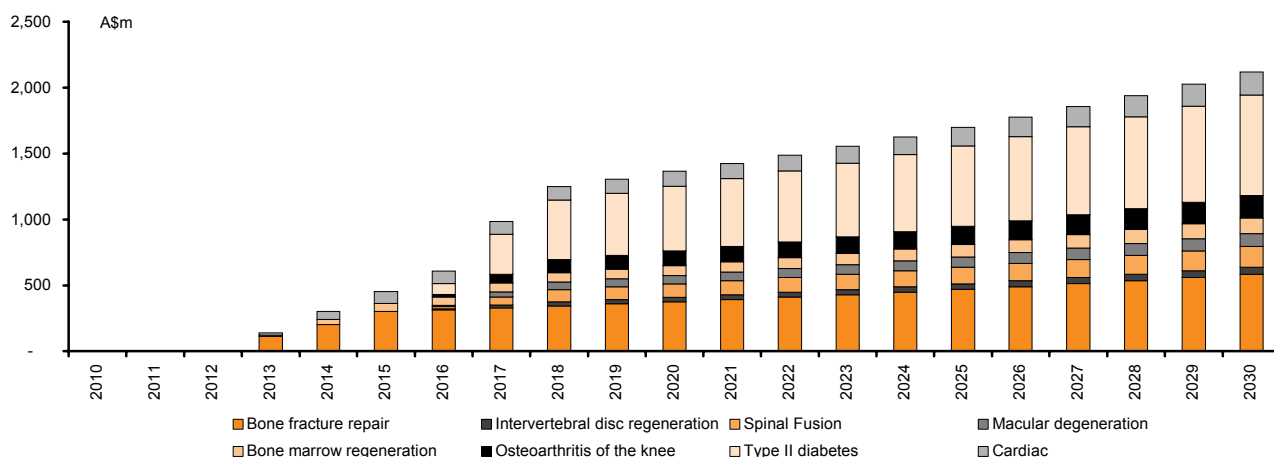


Source: RBS estimates, PubMed

Significant upside potential

Using the assumptions listed for each market and a simple DCF valuation, we estimate a total NPV for MSB of A\$10.41 per share. We believe MSB and its associate company, Angioblast, have opportunities in several large markets. It may be less conservative to assume that MSB will find market opportunity in each, but most of our market analysis has been based around relatively conservative numbers with small market shares and limited growth in the US only. Hence, we believe there is a real opportunity for MSB to see significant future revenue. We see particularly good potential for Angioblast in the CHF and diabetes markets, and for MSB in the OA and disc-regeneration markets, assuming the product proves to be safe and efficacious given its unique application properties.

Chart 2 : MSB opportunities – projected revenue growth – NPAT margin 20%, market share 5%



Source: RBS estimates, PubMed

Further equity raising

We believe it is likely that MSB will require a further equity raising to complete its clinical trial process before it achieves positive income. This will further dilute our estimated upside NPV per share without creating additional revenue for our scenario analysis (given we assume the completion of all trials can be funded on existing equity before starting to generate positive cash flow). This fact should be considered in building a full forecast picture. We analyse the implication should MSB need to issue an additional 10m-20m shares before generating positive cash flow, and the possible resultant NPV per share. This is shown in the next table.

Table 11 : NPV per share with equity raising

Number of shares (m)	124.2	135	150	165
NPV per share	10.41	9.58	8.63	7.84

Source: RBS estimates, PubMed

Still uncertainty, but signs are positive

There is still a good deal of uncertainty around MSB’s viability in most of its prospective markets. Pre-clinical trials, although positive, give no real enough indication of a product’s true viability and full foresight on future market conditions is difficult to obtain. In its favour, MSB’s base product is found naturally in the body, and we see little reason to believe that injections of concentrated numbers would cause serious health issues or be relatively less effective in doing their natural job. Cancer concerns arising from the use of embryonic stem cells have not been mirrored in the use of adult stem cells. Problems associated with overgrowth of bones or tissue in sensitive areas (like BMP complications in cervical spine fusions) are more likely, but less of a concern. If this becomes an issue, we believe it could potentially be controlled by appropriate dosage and should only marginally affect the products’ viability.

To date, all preclinical and Phase II trials have shown good indications for product viability. We believe there is potential simply because no other product can directly rebuild components of organs, tissue, bone and muscle. We think MPCs have broad appeal that could easily extend beyond the markets covered here. We believe this analysis demonstrates there is significant upside potential for MSB if its product delivers. As it stands, there have been no significant adverse effects or health issues and all Phase II or pre-clinical trials indicate a product with market viability. Its unique technology platform and clinical progress probably also places it in the strongest position for its markets relative to its stem-cell competitors. Therefore we believe this is a solid investment for investors with a higher risk appetite.

10. Further scenario analysis

To further illustrate MSB’s market potential we have included further scenario analyses. Our base-case assumptions are shown in Table 12.

Table 12 : Assumptions

Market opportunity	First year of revenue	Market value (US\$)
Cardiac	2013	3.1bn as of FY08
Diabetes	2016	13bn as of FY07
OA of the knee	2016	1.1bn as of FY07
Bone marrow regen	2013	2bn as of FY07
Macular degeneration	2016	1.75bn as of FY08
Spinal fusion	2016	1.1bn as of FY09
Disc regeneration	2016	448m as of FY13
Bone repair	2013	4.18bn as of FY09
Market growth rate		4.50%
WACC		10%
USD/AUD exchange rate		0.9

Source: RBS estimates, PubMed

Scenario 1

We show our analysis, calculating total NPV per share with varying market shares and NPAT margins in the next table. All other inputs remain the same. This analysis suggests that if MSB can generate market shares of 10% and margins of 30%, then the total upside could be A\$28.84.

Table 13 : Total NPV per share for varying assumptions (A\$ per share)

Market share	NPAT margin – 10%	NPAT margin – 20%	NPAT margin – 30%
1%	1.05	2.11	3.16
3%	3.11	6.23	9.34
5%	5.02	10.03	15.05
8%	7.87	15.75	23.62
10%	9.61	19.23	28.84

Source: RBS estimates, PubMed

Scenario 2

We demonstrate our analysis, calculating per-market NPVs with varying market shares (1-20%) in Table 13.

Table 14 : NPV per share for varying market shares by market

(A\$)	Market shares				
	1%	5%	10%	15%	20%
Cardiac	0.20	0.96	1.85	2.75	3.64
Diabetes	0.67	3.17	6.09	9.01	11.94
OA of the knee	0.15	0.71	1.36	2.02	2.67
Bone-marrow regen	0.14	0.65	1.25	1.85	2.45
Macular degeneration	0.09	0.40	0.78	1.15	1.52
Spinal fusion	0.14	0.65	1.26	1.86	2.46
Disc regeneration	0.05	0.22	0.42	0.62	0.82
Bone repair	0.68	3.28	6.22	9.16	12.10
Total value	2.11	10.03	19.23	28.41	37.60

Source: RBS estimates, PubMed

We maintain our assumption of an NPAT margin at 20%, constant, and all other inputs kept the same. This analysis suggests that if MSB can gain significant success (20% or more market share) in most of its markets then there should be significant upside.

What have we done with our forecasts?

Our DCF-based valuation is unchanged at A\$1.60. As a result of this analysis, we have greater confidence regarding the potential upside for MSB's portfolio of opportunities. On an industry-wide basis, we believe the chance of getting a product to market from the Phase II clinical trial stage is in the order of 20-30%. In developing our target price, we now use a 20% risk-weighting of our valuation of MSB's opportunities (ie, 20% x A\$10.41). Hence, we increase our target price to A\$2.08 (from A\$1.60).

Buy recommendation

We continue to believe MSB is more likely than not to partner to take MPC to market. Should the technology continue to progress through clinical trials, we believe MSB may become an acquisition target. Hence, we believe the risk that MSB will be unable get a product to market is not inconceivable. MSB's patent position is strong, but we think the company is unlikely to be cash flow positive before FY12. We therefore believe MSB is an opportunity for investors with a higher risk appetite.

Finally, we update our forecasts for our expected share capital raisings in FY10F and FY11F. Given the recent increase in MSB's share price, this has affected EFPOWA and hence EPS, particularly in FY12F. This is shown in Table 14.

Table 15 : MSB – changes to forecasts

	FY10F			FY11F			FY12F		
	Prev	Rev	Diff	Prev	Rev	Diff	Prev	Rev	Diff
EBIT (A\$m)	-11.0	-11.0	0.0	-12.4	-12.4	0.0	0.3	0.3	0.0
NPAT (A\$m)	-13.2	-13.2	0.0	-14.5	-14.5	0.0	-1.6	-1.6	0.0
EPS (c)	-9.7	-9.9	-0.1	-9.5	-9.9	-0.4	-1.0	-1.1	-0.1
DPS (c)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net op cash flow (A\$m)	-10.7	-10.7	0.0	-12.2	-12.2	0.0	1.8	1.8	0.0

Source: RBS forecasts

Upside risks to our target price include faster-than-expected progression to production of MSB's MPC technology, while downside risks include a lack of scalability of the manufacturing process.

MSB – financial summary

Year to 30 Jun (A\$m)	AIFRS 2008A	AIFRS 2009A	AIFRS 2010F	AIFRS 2011F	AIFRS 2012F	Closing price (A\$)	2.13	Price target (A\$)	2.08	
Income statement						Valuation metrics				
Divisional sales	0.0	0.0	0.0	0.0	24.2	Preferred methodology	DCF	Val'n (A\$)	\$ 2.08	
Total revenue	0.0	0.2	0.2	0.2	24.4	DCF valuation inputs				
EBITDA	-8.7	-10.0	-10.9	-12.4	1.5	Rf	5.25%	10-year rate	5.25%	
Associate income	-2.1	-2.9	-2.9	-2.9	-2.9	Rm-Rf	6.00%	Margin	2.0%	
Depreciation	-0.2	-0.1	-0.1	0.0	-1.2	Beta	1.50	Kd	7.25%	
EBITA	-8.8	-10.1	-11.0	-12.4	0.3	CAPM (Rf+Beta(Rm-Rf))	14.2%	Ke	14.2%	
Amortisation/impairment	0.0	0.0	0.0	0.0	0.0	E/EV*Ke+D/EV*Kd(1-t)		NPV cash flow (A\$m)	207.4	
EBIT	-8.8	-10.1	-11.0	-12.4	0.3	Equity (E/EV)	100.0%	Minority interest (A\$m)	0.0	
EBIT(incl associate profit)	-11.0	-13.0	-13.9	-15.3	-2.6	Debt (D/EV)	0.0%	Net debt (A\$m)	-16.5	
Net interest expense	0.9	0.7	0.7	0.8	0.9	Interest rate	7.25%	Investments (A\$m)	0.0	
Pre-tax profit	-10.1	-12.3	-13.2	-14.5	-1.6	Tax rate (t)	30.0%	Equity market value (A\$m)	223.9	
Income tax expense	0.0	0.0	0.0	0.0	0.0	WACC	14.2%	Diluted no. of shares (m)	133.7	
After-tax profit	-10.1	-12.3	-13.2	-14.5	-1.6			DCF valuation (A\$)	1.67	
Minority interests	0.0	0.0	0.0	0.0	0.0					
NPAT pre significant items	-10.1	-12.3	-13.2	-14.5	-1.6	Multiples	2009A	2010F	2011F	2012F
Significant items	0.0	0.0	0.0	0.0	0.0	Enterprise value (A\$m)	268.3	263.4	259.8	258.3
Reported NPAT	-10.1	-12.3	-13.2	-14.5	-1.6	EV/Sales (x)				10.7
						EV/EBITDA (x)	-26.8	-24.2	-20.9	169.5
Cash flow statement	2008A	2009A	2010F	2011F	2012F	EV/EBIT (x)	-26.5	-24.0	-20.9	845.6
EBITDA	-8.7	-10.0	-10.9	-12.4	1.5	PE (normalised) (x)	-21.5	-21.6	-21.6	-194.0
Change in working capital	0.0	0.0	0.2	0.2	0.3	PEG (normalised) (x)				
Net interest (pd)/rec	0.8	0.7	0.7	0.8	0.9	At target price	2009A	2010F	2011F	2012F
Taxes paid	0.0	0.0	0.0	0.0	0.0	EV/EBITDA (x)	-26.2	-23.6	-20.4	165.4
Other oper cash items	0.0	0.0	0.0	0.0	0.0	PE (normalised) (x)	-21.1	-21.1	-21.1	-189.7
Cash flow from ops (1)	-5.4	-8.6	-10.0	-11.4	2.7	Comparable company data (x)	2010F	2011F	2012F	
Capex (2)	-0.1	-0.2	-0.1	0.0	-1.2	Alchemia	EV/EBITDA	-26.7	10.4	4.7
Disposals/(acquisitions)	-6.4	-0.2	0.0	0.0	0.0	Year to 30 Jun	EV/EBIT	-20.0	12.4	5.3
Other investing cash flow	0.3	0.0	0.0	0.0	0.0		PE	-23.1	12.8	6.8
Cash flow from invest (3)	-6.2	-0.4	-0.1	0.0	-1.2		PEG	-6.6	3.7	1.9
Incr/(decr) in equity	13.6	11.4	15.0	15.0	0.0	Tissue Therapies	EV/EBITDA	-2.7	-15.2	4.4
Incr/(decr) in debt	0.0	0.0	0.0	0.0	0.0	Year to 30 Jun	EV/EBIT	-2.7	-15.2	4.4
Ordinary dividend paid	0.0	0.0	0.0	0.0	0.0		PE	-5.8	-38.2	14.7
Preferred dividends (4)	0.0	0.0	0.0	0.0	0.0		PEG			
Other financing cash flow	0.0	0.0	0.0	0.0	0.0	Per share data	2009A	2010F	2011F	2012F
Cash flow from fin (5)	13.6	11.4	15.0	15.0	0.0	No. shares	124.2	143.2	150.3	150.3
Forex and disc ops (6)	0.0	0.0	0.0	0.0	0.0	EPS (cps)	-9.9	-9.9	-9.9	-1.1
Inc/(decr) cash (1+3+5+6)	2.0	2.4	4.9	3.6	1.5	EPS (normalised) (c)	-9.9	-9.9	-9.9	-1.1
Equity FCF (1+2+4)	-5.5	-8.8	-10.1	-11.4	1.5	Dividend per share (c)	0.0	0.0	0.0	0.0
						Dividend payout ratio (%)	0.0	0.0	0.0	0.0
Balance sheet	2008A	2009A	2010F	2011F	2012F	Dividend yield (%)	0.0	0.0	0.0	0.0
Cash & deposits	14.1	16.5	21.4	25.0	26.5	Growth ratios	2009A	2010F	2011F	2012F
Trade debtors	0.1	0.3	0.4	0.4	0.5	Sales growth	na	na	na	na
Inventory	0.0	0.0	0.0	0.0	0.0	Operating cost growth	15.2%	8.6%	14.2%	82.5%
Investments	12.8	9.3	9.3	9.3	9.3	EBITDA growth	15.2%	8.6%	14.2%	na
Goodwill	0.0	0.0	0.0	0.0	0.0	EBITA growth	14.5%	8.5%	13.0%	na
Other intangible assets	0.5	0.5	0.4	0.4	0.4	EBIT growth	14.5%	8.5%	13.0%	na
Fixed assets	0.2	0.2	0.2	0.2	0.2	Norm. NPAT growth (pre GW)	22.1%	7.3%	9.7%	-88.6%
Other assets	0.1	0.1	0.1	0.1	0.1	Norm. NPAT growth	22.1%	7.3%	9.7%	-88.6%
Total assets	27.8	27.0	31.9	35.6	37.1	Norm. EPS growth (pre GW)	12.3%	-0.3%	0.0%	na
Short-term borrowings	0.0	0.0	0.0	0.0	0.0	Norm. EPS growth	12.3%	-0.3%	0.0%	na
Trade payables	1.6	1.2	1.4	1.7	2.0	Operating performance	2009A	2010F	2011F	2012F
Long-term borrowings	0.0	0.0	0.0	0.0	0.0	Asset turnover (%)	0.0	0.0	0.0	16.6
Provisions	0.0	0.0	0.0	0.0	0.0	EBITDA margin (%)	na	na	na	6.3
Other liabilities	0.0	0.0	2.9	5.7	8.6	EBIT margin (%)	na	na	na	1.3
Total liabilities	1.6	1.2	4.3	7.4	10.6	Net profit margin (%)	na	na	na	-6.8
Preference shares						Return on net assets (%)	-39.3	-39.8	-44.2	1.2
Hybrid equity	0.0	0.0	0.0	0.0	0.0	Net debt (A\$m)	-16.5	-21.4	-25.0	-26.5
Share capital	51.0	62.5	77.5	92.5	92.5	Net debt/equity (%)	-64.1	-77.6	-88.9	-100.0
Other reserves	3.8	4.2	4.2	4.2	4.2	Net interest/EBIT cover (x)	14.4	16.6	15.3	-0.3
Retained earnings	-28.6	-40.8	-54.0	-68.5	-70.1	ROIC (%)	-58.5	-83.1	-140.5	6.9
Other equity	0.0	0.0	0.0	0.0	0.0	Internal liquidity	2009A	2010F	2011F	2012F
Total equity	26.2	25.8	27.6	28.1	26.5	Current ratio (x)	14.3	5.1	3.4	2.6
Minority interest	0.0	0.0	0.0	0.0	0.0	Receivables turnover (x)	na	0.0	0.0	50.0
Total shareholders' equity	26.2	25.8	27.6	28.1	26.5	Payables turnover (x)	na	8.3	7.9	12.1
Total liabilities & SE	27.8	27.0	31.9	35.6	37.1					

Priced at close of business 21 Jan 2010.
Source: Company data, RBS forecasts

Recommendation structure

Absolute performance, short term (trading) recommendation: A Trading Buy recommendation implies upside of 5% or more and a Trading Sell indicates downside of 5% or more. The trading recommendation time horizon is 0-60 days. For Australian coverage, a Trading Buy recommendation implies upside of 5% or more from the suggested entry price range, and a Trading Sell recommendation implies downside of 5% or more from the suggested entry price range. The trading recommendation time horizon is 0-60 days.

Absolute performance, long term (fundamental) recommendation: The recommendation is based on implied upside/downside for the stock from the target price. A Buy/Sell implies upside/downside of 10% or more and a Hold less than 10%. For UK Mid/Small Cap Analysis a Buy/Sell implies upside/downside of 10% or more, an Add/Reduce 5-10% and a Hold less than 5%. For UK-based Investment Funds research the recommendation structure is not based on upside/downside to the target price. Rather it is the subjective view of the analyst based on an assessment of the resources and track record of the fund management company. For listed property trusts (LPT) or real estate investment trusts (REIT) the recommendation is based upon the target price plus the dividend yield, ie total return.

Performance parameters and horizon: Given the volatility of share prices and our pre-disposition not to change recommendations frequently, these performance parameters should be interpreted flexibly. Performance in this context only reflects capital appreciation and the horizon is 12 months.

Sector relative to market: The sector view relative to the market is the responsibility of the strategy team. Overweight/Underweight implies upside/downside of 10% or more and Neutral implies less than 10% upside/downside.

Target price: The target price is the level the stock should currently trade at if the market were to accept the analyst's view of the stock and if the necessary catalysts were in place to effect this change in perception within the performance horizon. In this way, therefore, the target price abstracts from the need to take a view on the market or sector. If it is felt that the catalysts are not fully in place to effect a re-rating of the stock to its warranted value, the target price will differ from 'fair' value.

Distribution of recommendations

The tables below show the distribution of recommendations (both long term and trading). The first column displays the distribution of recommendations globally and the second column shows the distribution for the region. Numbers in brackets show the percentage for each category where there is an investment banking relationship.

Long term recommendations (as at 22 Jan 2010)		
	Global total (IB%)	Asia Pacific total (IB%)
Buy	630 (10)	414 (1)
Add	0 (0)	0 (0)
Hold	398 (5)	226 (0)
Reduce	0 (0)	0 (0)
Sell	107 (0)	62 (0)
Total (IB%)	1135 (7)	702 (0)

Source: ABN AMRO

Trading recommendations (as at 22 Jan 2010)		
	Global total (IB%)	Asia Pacific total (IB%)
Trading Buy	3 (0)	3 (0)
Trading Sell	0 (0)	0 (0)
Total (IB%)	3 (0)	3 (0)

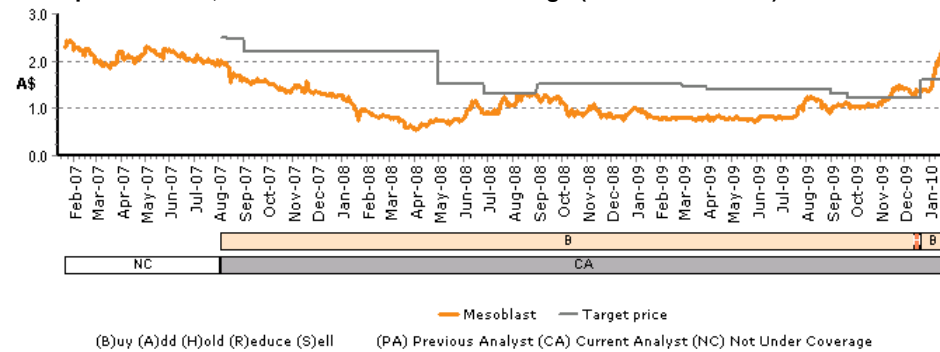
Source: ABN AMRO

Valuation and risks to target price

Mesoblast (RIC: MSB.AX, Rec: Buy, CP: A\$1.990, TP: A\$2.083): Our valuation of MSB is based on a discounted cash flow model, from which we derive our target price. Upside risks include the faster-than-expected progression to production of MSB's MPC technology, while downside risks include the lack of scalability of the manufacturing process.

Mesoblast coverage data

Stock performance, recommendations and coverage (as at 21 Jan 2010)



Trading recommendation history (as at 22 Jan 2010)

Date	Rec	Analyst
	n/a	

Source: ABN AMRO

Dr David Stanton started covering this stock on 2 Aug 07

Source: ABN AMRO

Regulatory disclosures

Subject companies: MSB.AX

Global disclaimer

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