

**In this edition...**

Unloved and unknown is the fate of many small biotechs. However, that status is not always deserved, with significant value sometimes unrecognised by the market. We argue that this is the case with Biodiem, a stock that fell from grace several years ago, but with its BDM-E peptide in a Phase II trial, the stock may be set for a strong ride this year.

Elsewhere inside we comment on Avexa's Phase II trial of ATC and its \$75 million capital raising, we note that Optiscan Imaging has been suggested as a takeover target and profile Stem Cell Science plc, which is set to list on the ASX, following an unremarkable experience on London's Alternative Investment Market.

**The editors**

**Companies covered: AVX,BDM,OIL  
IPO profile: Stem Cell Sciences plc**

	Bioshares Portfolio
Year 1 (May '01 - May '02)	21.2%
Year 2 (May '02 - May '03)	-9.4%
Year 3 (May '03 - May '04)	70.0%
Year 4 (May '04 - May '05)	-16.3%
Year 5 (May '05 - May '06)	77.8%
Year 6 (from 5 May '06)	19.8%
<b>Cumulative Gain</b>	<b>233%</b>
<b>Average Annual Gain</b>	<b>27.2%</b>

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# Bioshares

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*Delivering independent investment research to investors on Australian biotech, pharma and healthcare companies.*

## **Biodiem – An Attractive Value Proposition**

Every so often compelling investment considerations appear where through one or more developments, the value proposition becomes resoundingly clear in favour of the investor. Biodiem (BDM: 35 cents) is one such stock. The company is well known to most biotech investors in Australia. It listed in January 2004 at \$1.25 per share. However, it has never traded at or above this level and its poor market performance has seen most investors ignore and forget about the company's commercial prospects.

Biodiem is commercialising technology developed at several research institutes in St Petersburg, Russia. Quite possibly the company's connections connection with Russian research organisations has been at the root of investor skepticism over Biodiem. However, the veil of doubt and ignorance is slowly being lifted from the Biodiem investment proposition. Biodiem is not the only Australian company commercialising Russian research, with privately held **Implicit Bioscience** in Brisbane developing a registered Russian drug, oglufanide disodium (IM862). The Biodiem proposition is now worth careful consideration, although it should still be remembered that this stock remains a speculative investment.

### **Investment appeal - Overview**

In broad terms, Biodiem has a number of appealing aspects for investors. Firstly the company has a low capitalisation of \$18 million. At 31 December last year the company had cash assets of \$5.6 million and its loss for the first six months of this financial year was only \$1.3 million. The company's influenza vaccine program has been partnered with Nobilon and is expected

to enter Phase I clinical trials in 2008. The company's other main program is in the treatment of eye diseases. A Phase II trial is underway in 192 patients with diabetic macular oedema with results expected at the end of this year.

### **BDM-E**

One of Biodiem's programs of emerging relevance is its tetra-peptide, called BDM-E, for the potential treatment of eye diseases. The compound is believed to have a dual function, potentially stimulating growth of new epithelial cells in the retina but also inhibiting unwanted blood vessel formation in the eye.

The compound has been tested in Russia in at least 56 people with macular degeneration improving visual acuity in 82% of patients. It also was found to have a substantial effect (68%) in reducing the area and extent of retinal damage according to the company's prospectus. The compound has also achieved some positive results in a small number of patients with diabetic retinopathy.

### **Phase II Study Underway**

In February last year, Biodiem commissioned a 192 patient study to be undertaken by a Swiss contract research organization, specialising in ophthalmology, in Russia in treating diabetic macular oedema. This condition occurs because of the growth of unwanted blood vessels in the eye. BDM-E is thought to inhibit the growth of new blood vessels. The current trial with BDM-E is now over 75% enrolled and is expected to be completed by mid year.

*Cont'd over*

That previous small clinical studies have returned positive results and that the compound is being used in Russia on compassionate grounds with no serious adverse events to date provides some reason for early optimism with this program.

### Market for drugs for eye diseases

The market interest in pharmaceuticals for treating eye diseases was stimulated through a US company, **Eyetech Pharmaceuticals**. Its main product, Macugen, an aptamer that binds to one of the VEGF compounds, was thought to have a massive market potential. Eyetech was acquired by **OSI Pharmaceuticals** at the end of 2005 for US\$638 million. In 2006 it generated sales of only US\$103 million and has lost relevance when **Genentech's** Lucentis hit the market in the US in June of last year.

Largely in the second half of 2006, Lucentis generated sales in the US of US\$380 million. Lucentis, an antibody fragment, is a VEGF inhibitor which has an affinity to five different forms of VEGF. Its efficacy far outweighs that of Macugen and has largely killed off the Macugen product. The market for macular degeneration drugs is expected to peak at over US\$5 billion in the future. Genentech's Avastin is also used off label for treatment of this disease. This commercial success in treating macular degeneration explains the surge in interest in the field.

The market is expected to be driven not just by effective therapies for eye diseases, but also from an aging population. In Australia over the next 20 years, the number of people over the age of 65 will double compared to an expected 20% increase in the overall population. Macular degeneration affects one in four people over 60 and two thirds of people over 90, of which one quarter lose vision because of it.

### Australian biotechs in this space

Locally, a validation of sorts of this for working in this therapeutic space is that two of Australia's Tier-I biotechs, **Peptech** and **Alchemia**, have marked out this area as one of great commercial relevance and have set up programs where they can establish a strong proprietary position. Peptech acquired Promics last year and that company's leading asset is a C5a receptor antagonist for the potential treatment of age-related macular degeneration (AMD). The program is currently at the preclinical phase ahead of a Phase I trial.

Alchemia has discovered new carbohydrate compounds that have potential to treat AMD and diabetic retinopathy. The company is seeking to partner out its AMD program and further develop the diabetic retinopathy program in-house. Both are at the preclinical stage of development.

**Psivida** has a license agreement with **Bausch & Lomb** for its Retisert (fluocinolone acetonide) product for the treatment of chronic non-infectious uveitis. It is receiving royalties in the order of \$1 million a year from Bausch & Lomb. The same active ingredient is currently in a Phase III trial for the treatment of AMD in a longer acting depot formulation. This program has been licensed to **Alimera Sciences**.

*Cont'd on page 3*

### **BDM-E – “Highly effective and remarkable”**

What is also of interest regarding the BDM-E program are comments made by one of the company's new directors, Dr John Brown at a recent company function. Brown was previously Vice President and Global Head of Translational Medicine at **GlaxoSmithKline** with 140 people working under him. Prior to taking up his position as director of Biodiem in September last year, Brown visited the St Petersburg research institutes to examine preclinical and clinic data for BDM-E. Having an expertise in bioactive peptides and peptide receptors, his comments, following a hands-on assessment of the data are worth noting.

According to Brown, the BDM-E compound appears to be highly effective and remarkable in its ability to prevent growth of new blood vessels. Only a very small dose has been used to achieve efficacy and it is most likely that the compound is working through a new mechanism of action that falls outside the very crowded VEGF space. According to Brown, these 'remarkable' results to date in Russia appear to confirm the belief that this peptide works on angiogenesis inhibition but through a new mechanism of action, potentially providing the company with completely virgin intellectual property space for Biodiem to mine. And after examining patient records, Brown says the clinical data was as remarkable as the preclinical data in improving visual acuity. Brown also suggested that if the compound is effective in shutting down blood vessel formation in the eye, then it could have other applications in controlling growth of other blood vessels.

Brown's comments are useful as they represent a form of independent due diligence that has been conducted on this technology that has otherwise been difficult to undertake for investors based in Australia. That the mechanism of action is unknown can have negative implications for the company as pharmaceutical groups that may have an interest in licensing this compound would most likely want to understand how it works before in-licensing the compound. Currently Biodiem has contracted Brown's group at the **University of Cambridge** to determine the mechanism of action of this compound. The hypothesis is that this peptide is not the an exact version of what the body uses to control blood vessel growth, but rather mimics what the body uses.

Brown also made an interesting point about the fate of this program should the current clinical trial not be successful. Making a reference to SSRI's (Selective Serotonin Reuptake Inhibitors) that are in widespread use today, two of the first three Phase III trial with these compounds failed. However, there was such confidence in the compounds that clinical development continued. According to Brown, there is enough background information on this compound that the program will continue even if statistical significance is not achieved in the current trial.

**BDM-E – Route of administration**

Most drugs to treat the common eye diseases are injected into the eye. There are several siRNA drugs in early clinical studies that seek to inhibit a VEGF pathway. Delivery of siRNA compounds into a cell is a stumbling block for these drugs but it is believed that cells in the retina preferentially take up siRNA. Not only is BDM-E assumed to work on a different angiogenic pathway, it has the added advantage of being a small peptide drug where cost of manufacture is very low, much lower than antibody drugs, and can be delivered through sub-cutaneous injection.

**Risks**

Whilst BDM-E has been used in approximately 300 people, it has not been in a formal clinical trial. The structure of the current trial is a double-blind placebo controlled study in 192 patients. However, there is no guarantee the ideal dose has been selected for this trial. Endpoints for the study are changes in macular oedema and changes in visual acuity. The objective at this stage is to conduct another Phase II study outside of Russia in 2008. The company is seeking to partner this program over the next 12 months, presumably upon the completion of the current trial, if the results show evidence of efficacy.

Genentech's Lucentis has set a high standard for the treatment of back of the eye diseases. This product is currently approved for the treatment of AMD and which quickly displaced its competitor Macugen because of its high efficacy. Lucentis is currently in a Phase III trial for diabetic macular oedema. Biodiem's Phase II trial is for this condition and its results will be compared to those achieved by Lucentis. The BDM-E compound has the added advantage that potentially not only does it inhibit blood vessel formation like Lucentis, but it may repair damaged retina cells.

**Patent position**

Biodiem has licensed patents over this compound from the **Instituta Bioregulyatsii I Genrontologii** and the **Saint Petersburg Insitute of Bioregulation and Gerontology of the North West Division of RAMS**. Patents over the compound for composition of matter and application were granted in 2004. The company has granted patent coverage in most major jurisdictions including the US, Europe, Australia and Japan out to 2019 (in the US). In recent weeks the company has extended its patent coverage by filing for a novel formulation for this drug candidate.

**Summary**

Biodiem is a virtual biotech company that has made good use of its capital to commercialise its assets. Its Chairman, Hugh Morgan, who was previously CEO of **WMC** and is now also a director of the **Reserve Bank of Australia**, adds significant credibility and guidance to this company. His influential links helped secure the services of Dr John Brown to the board of Biodiem.

In our view Biodiem is a significantly undervalued stock. The funding risk with this company is low, with \$5.6 million in cash at the end of last year and a low burn rate. This stock was added to our Model Portfolio last week when we upgraded our recommendation to **Speculative Buy Class A**.

*In future editions of Bioshares, we will re-visit Biodiem's other main program, its live attenuated influenza vaccine that has been licensed to Nobilon.*

Bioshares

**Bioshares Model Portfolio (23 March 2007)**

Company	Price (current)	Price added to portfolio
Acrux	\$1.38	\$0.83
Alchemia	\$1.20	\$0.67
Biodiem	\$0.35	\$0.29
Biota Holdings	\$1.56	\$1.55
Cytopia	\$0.66	\$0.46
Chemgenex Pharma.	\$0.85	\$0.38
Optiscan Imaging	\$0.46	\$0.35
Neuren Pharmaceuticals	\$0.48	\$0.70
Peplin	\$0.82	\$0.83
Peptech	\$1.86	\$1.31
Phylogica	\$0.39	\$0.42
Probiotec	\$1.08	\$1.12
Progen Pharmaceuticals	\$7.30	\$3.40
Sunshine Heart	\$0.20	\$0.19
Tissue Therapies	\$0.56	\$0.58

**The Bioshares 20 Index**

Change from June 30, 2006 **52.0%**  
 Change from Dec 31, 2006 **20.4%**  
 Change - week ago **5.3%**

**Nasdaq Biotech Index**

Change from June 30, 2006 **4.4%**  
 Change from Dec 31, 2006 **-2.9%**  
 Change - week ago **-6.2%**

## IPO Profile - Stem Cell Sciences plc

Stem Cell Sciences plc was co-founded as Stem Cell Sciences Pty Ltd in Melbourne in 1994 by Dr Peter Mountford and Professor Austin Smith at the **University of Edinburgh**. Sixteen of out of twenty of Stem Cell Sciences' patent families are licensed on a world-wide, exclusive basis from the University of Edinburgh. Professor Smith is named as an inventor on ten of those patent families. He is now located at **Cambridge University**.

Stem Cell Sciences Pty Ltd was the parent company of the Stem Cell Sciences group until SCS Holdings in the UK became the parent company following a one-for-one share swap in 2003. Then Stem Cell Sciences plc became the parent company following a one-for-one share swap in 2005 with SCS Holdings. The company listed on the London Stock Exchange's Alternative Investment Market (AIM) in 2005, raising \$13.8 million.

The company's forthcoming listing on the ASX in April this year is being used to raise up to \$12 million. Stem Cell Sciences plc shares will trade as Chess Depositary Interests (CDIs) on the ASX.

### What are stem cells?

Stem cells are the most basic cells that give rise to other cells in many living organisms. A cell of great interest in human studies is the embryonic stem cell, which gives rise to all other cells. However, there are many other stem cells that are known as precursor or adult stem cells. These cells have attracted the interest of researchers because the development of these cells for therapeutic purposes avoids not only the infringement of the property right surrounding various earlier stage stem cells, but avoids the ethical considerations attached to the extraction of embryonic stem cells from human embryos.

### What is the investment relevance of stem cells?

Stem cells have become a major subject of scientific research because of their potential to aid traditional drug discovery activities, but perhaps more significantly, become the basis for therapies in their own right. A crude measure of activity can be obtained from searching scientific publications. A search of Pubmed, a major medical research service, of the number of papers that included 'stem cells' in their title drew 443 hits for the year 2000, compared to 2,263 last year, with growth recorded in every

intervening year. Growth in stem cell research around the globe has been vigorous despite the area being subject to major political, religious and legislative efforts to influence aspects of stem cell research. It has also been the subject of at least one scandal, in particular that of fraud committed by a South Korean researcher.

Stem cells can be used in the evaluation of traditional pharmaceutical drugs for the effects of these drugs on genes, including regulation studies (ie what genes are turned 'on' or 'off'), on certain cellular proteins and for toxicology studies. To some degree, cell based studies can displace the use of animals in drug discovery and drug development studies, and this trend is likely to continue for reasons of cost and effectiveness

Progress in stem cell research towards the production of more reliable (ie 'robust') research outcomes has been held back by the lack of high quality research tools, especially the lack of chemically defined media and also media that does not use animal sera. A serum such as foetal bovine calf serum is a rich broth of nutrients containing many elements that support the growth of cells. However, this 'rich broth' creates a level of randomness or 'noise' in scientific experiments which researchers would prefer eliminated. Several companies, including Stem Cell Sciences have now developed chemically defined, animal serum free media and it could be argued that these products, made by only a few companies, represent a new phase in stem cell research. Another facet of the development of chemically defined, animal serum free media is that stem cells that are developed with the intent of commercial therapeutic endpoints may be safer, with the risk of contaminations (such as viral transfection) reduced or eliminated.

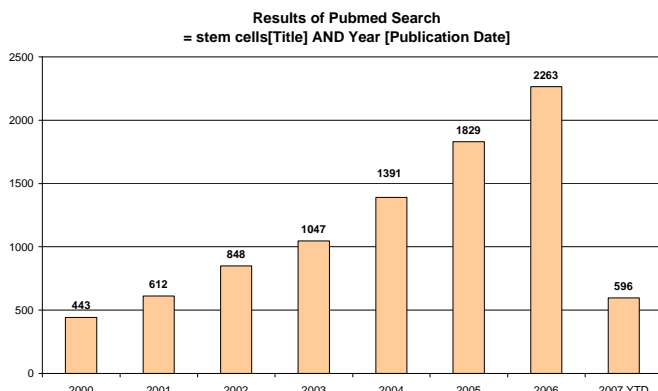
### Description of SCSs Business

Stem Cell Sciences current business model integrates a products business (reagents and media) with services operations, together with intellectual property out-licensing activities. A presently less developed, but longer term ambition is for the company to develop stem cell derived therapeutic products.

The company collaborates extensively with academic researchers, and is a designated commercial partner for a number of collaborations. The collaborations cover cell sourcing, growing and engineering cells and differentiation, purification and formatting of cells for research and pre-clinical application.

The company's four businesses include SC Proven, SC Licensing, SC Services and SC Therapies.

The research market serum-free media products the company has developed to date include HEScGRO Medium for Human ES Cell Culture and ESGRO Complete Clonal Grade Medium. **Millipore** have the rights to manufacture, distribute and market these products. Products to be launched soon include NDiff Neuro-2 Medium Supplement and NDiff Neuro-27 Medium Supplement. Two more products in beta testing are NDiff RHB-A and NDiffN2B27.





SCS's contract services business, SC Services, has recently opened a new automated cell production facility in Cambridge, UK. Cells from this facility will be supplied to the drug discovery industry.

The company's stem cell therapy research, which is at an early stage, is targeted at Parkinson's disease, eye diseases, epilepsy and Duchenne Muscular Dystrophy (with SCS KK). Two programs are expected to enter the pre-clinical stage in 2007.

### Strengths

#### Collaborations

The argument behind the Stem Cell Sciences business model is that the science of stem cells is under constant change. It is also an area of research that is 'in need of validation' and the demand for improvements in many areas is high. The source of most innovation in stem cell research does not reside in companies, but in academic settings. Therefore, developing, maintaining and partnering with researchers allows a company such as Stem Cell Sciences to be in a position to capture innovation and invention that can form the basis for new products and methods.

#### Personnel

On the personnel side, the company recently appointed David Dodd to the Chairmanship of the company. This appointment is a very strong sign of the company's desire to tighten the company's focus and drive the business hard. Dodd was previously the CEO of **Serologicals**, a US based life sciences firm, that in a six year period grew the value of that firm from US\$85 million to US\$1.4 billion, a point at which it was acquired by Millipore.

### Weakness

#### Capital requirements

Although SCS has been successful generating income from the sale of products and services and through the licensing of IP, the company's overall capital requirements are not likely to be fully supported by these activities in the medium term. Hence investors should be conscious of the fact that SCS is highly likely to re-visit the market to garner follow-on funding for specific business development activities, including clinical trials and for working capital requirements and potentially for acquisitions.

#### A challenge for cell therapy companies

An issue for all companies that operate in the fields of cell therapies is how companies will appropriate value from an industrial system where cell therapy providers are located in hospitals and a do-it-yourself approach dominates. Cell therapy companies face the challenge of setting up standardised and turn-key systems to capture value from their proprietary stem cell therapies.

A possible scenario is that as cell therapy matures, full integration will occur with cell therapy businesses owning specialised treatment facilities within or alongside hospitals.

#### A commercially unproven therapeutic field

To date there are no commercially proven cell therapy products. Noteworthy, or opinion-leading biotech investors will mark this sub-sector down until cell therapy companies put commercial runs on the board.

### The 'multiple businesses' challenge

Another challenge facing SCS emanates from its structure as a business with four distinct areas of activities. While there is good reason for this arrangement at present, the risk for the company is that its success in its revenue generating business may harm value recognition in its therapeutics arm (although no clinical programs are underway at the moment). Echoes of **Gropep**, which combined a cell culture products business with a drug discovery business can be heard here, with a successful revenue business neutralising market recognition of that company's drug development program.

### Opportunity

Stem Cell Sciences is one of a number of companies to survive the stem cell sector investment meltdown that commenced with the US embargo in the US Federal public funding of embryonic stem cell research in 2001. (Australia's **Bresagen** is one that didn't.) Stem Cell Sciences is conscious of its history and is alert to opportunities to consolidate assets in the stem cell arena. Its expertise, its choice of business location in progressively oriented countries such as the UK, Australia and Japan, and its 'view from the deck of history' may see it become a successful consolidator in the space.

### Lessons from similar companies

One company that bears some similarities to Stem Cell Sciences is **Starpharma Holdings**. Starpharma has been commercialising a synthetic chemistry technology platform, based on dendrimer chemistry. Like SCS, Starpharma has rights to an extensive patent portfolio. What is evident from the Starpharma experience is that getting into the clinic and *getting data* or even getting commercial validation through sales of research or other products as quickly as possible is essential if the company expects to do well on the stockmarket.

### Summation

SCS is fundamentally a knowledge-driven enterprise. The company's deep knowledge and highly credible knowledge of stem cells and stem cell technologies and systems supports three commercial activities and is critical to success in a fourth area, that of therapeutic product development.

SCS appears to have marked out a value creation strategy that over the long term has the potential to generate exceptional value from new therapies. However, before that exceptional value is created, the company will need to balance strong commercial focus and cost control with the appropriate maintenance of relationships with academic collaborators. The indicative capitalisation of the firm, assuming the full raising of \$12 million is completed, is \$39 million.

Date offer opens: 19 March 2007

Date offer closes: 5 April 2007

Expected listing date: 12 April 2007

*Australian investors are required to read the prospectus, a copy of which can be downloaded from [www.bellpotter.com](http://www.bellpotter.com)*

## Avexa Launches \$75 million Capital Raising to Fund Phase III Trial

Avexa this week announced the results from its Phase IIb trial of its HIV drug candidate, apricitabine (ATC). On the face of it, it was a good result where the average change in viral load over 21 days was  $0.8 \log_{10}$ , exceeding the target of  $0.6 \log_{10}$  drop.

Additional data will be helpful in assessing these results which are due to be reported at a scientific meeting later this year. Specifically, information on sustainability of the treatment over 24 weeks (these results measured changes in viral load over 21 days) will be important and long term safety data on this compound will also need to be provided before the product reaches the market.

It should be noted that this study measured the average drop in viral load, being  $0.8 \log_{10}$  or a 6.3 fold drop. Of the 33 patients treated with apricitabine, 13 achieved a very high reduction in viral load (above  $1.5 \log_{10}$  drop or more that 31 fold) and of these one patient experienced an extremely high drop in viral load, in excess of  $2.5 \log_{10}$  or greater than a 316 fold drop in viral load. That the average result just cleared the target  $0.8 \log_{10}$  viral load, it would appear to suggest that quite a few of the patients did not achieve the target  $0.6 \log_{10}$  viral load drop.

It should also be noted that this was a small Phase II trial, involving only 47 patients. Other HIV Phase II trials have involved close to 300 patients in the past.

### \$75 million capital raising

On the back of these results Avexa is undertaking a \$75 million capital raising. Of this amount, \$15 million has been placed with US institutions and \$60 million is being raised through an underwritten rights issue, both at 53 cents.

The structure of this capital raising is somewhat disappointing. Firstly, the price at which both raisings are being conducted is at a 22% discount to the closing price before the Phase II results were released (or a 16% discount to the 10 day weighted average prior to the trading halt). What is more usual is that a capital raising is undertaken at a discount to the share price after a period when the results have been released and the shares have resumed trading. For instance, when Progen released its positive Phase II data in December last year, its capital raising was conducted a week later at a 10% premium to its closing price prior to release of the data.

Another concern is the record date for entitlements for shareholders to participate in the capital raising. Avexa's entitlement date is next Thursday 29 March, where up until yesterday (Thursday 22 March) anyone who bought shares in Avexa could participate in the rights issue. This arrangement reduces the reward for existing shareholders who were shareholders prior to the announcement of Phase II trials. A potential effect of this is to drive the share price down to 53 cents.

### Summary

Avexa can be credited for an outstanding performance in generating considerable shareholder value in a very short space of time. The recent Phase IIb study results released appear to be good although longer term data will keenly waited upon. However, the structure of the capital raising completed and underway is disappointing and we expect significant price weakness over the coming week. At 53 cents (price of the capital raising), the stock appears fully valued. At its closing price (78 cents) Avexa is valued at \$310 million.

Bioshares recommendation: **Sell**

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## Optiscan Imaging – A Future Takeover More Likely than Not

Credit Suisse released a research report last week on Hoya Corporation, specifically looking at its acquisition of Pentax which is due to be completed by October this year. This is relevant to Optiscan Imaging (OIL: 45.5 cents), which has a product development and distribution agreement with Pentax.

Optiscan's confocal microscope technology has been coupled with Pentax's endoscope to produce a confocal endomicroscope called the ISC1000. The product is into its second year of sales and in the first six months of this financial year, Optiscan generated sales of \$2.5 million from Pentax.

In previous editions of Bioshares (#194), we highlighted Optiscan as a potential takeover target. It appears that Credit Suisse is of the same view. An excerpt from the report is quoted below.

*"The partner for the company's confocal microendoscopy system is listed Australian company Optiscan Imaging. Optiscan Imaging not only receives A\$2,000 - A\$18,000 per unit of sale of key parts to Pentax, but also receives royalties of 7.5% - 10% of the price of the scope. This creates a significant cost burden for Pentax. Optiscan's market capitalisation is currently around \$50 million. Accordingly we believe Optiscan Imaging is the kind of company that could easily become the target of a takeover bid by Pentax."*

Also of relevance in the report is the note that Pentax does not have exposure to rigid endoscopes, a fast growing area of the market. That Optiscan is developing its own rigid endoscopes in our view makes Optiscan a more appealing acquisition for Pentax/Hoya.

It's a common strategy for larger partners/licensors to buy out royalty obligations from a partner. The larger partners will typically recognise the full value of a particular technology before other investors and a buyout at the right time can be much cheaper than if the product was fully matured in the market. At June 30, 2006, Pentax owned 3.3% of Optiscan Imaging, which it acquired when the initial collaboration with Optiscan was formed in 2002.

Bioshares recommendation: **Speculative Buy Class A**

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**How Bioshares Rates Stocks**

For the purpose of valuation, *Bioshares* divides biotech stocks into two categories. The first group are stocks with existing positive cash flows or close to producing positive cash flows. The second group are stocks without near term positive cash flows, history of losses, or at early stages of commercialisation. In this second group, which are essentially speculative propositions, *Bioshares* grades them according to relative risk within that group, to better reflect the very large spread of risk within those stocks.

**Group A**

Stocks with existing positive cash flows or close to producing positive cash flows.

- Buy** CMP is 20% < Fair Value
- Accumulate** CMP is 10% < Fair Value
- Hold** Value = CMP
- Lighten** CMP is 10% > Fair Value
- Sell** CMP is 20% > Fair Value  
(CMP–Current Market Price)

**Group B**

Stocks without near term positive cash flows, history of losses, or at early stages commercialisation.

**Speculative Buy – Class A**

These stocks will have more than one technology, product or investment in development, with perhaps those same technologies offering multiple opportunities. These features, coupled to the presence of alliances, partnerships and scientific advisory boards, indicate the stock is relative less risky than other biotech stocks.

**Speculative Buy – Class B**

These stocks may have more than one product or opportunity, and may even be close to market. However, they are likely to be lacking in several key areas. For example, their cash position is weak, or management or board may need strengthening.

**Speculative Buy – Class C**

These stocks generally have one product in development and lack many external validation features.

**Speculative Hold – Class A or B or C**

**Sell**

**Corporate Subscribers:** Phylogica, Neuren Pharmaceuticals, Pharmaxis, NeuroDiscovery, Prima Biomed, Biotech Capital, Cygenics, Cytopia, Biodiem, Peptech, Starpharma Holdings, Cogstate, Xceed Biotechnology, Incitive, Optiscan Imaging, Biomics, ChemGenex Pharmaceuticals, Medical Therapies

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