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Bioshares

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Edition 217

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

In this edition...
For investors, the company that biotech firms keep amongst the investment banks and corporate finance arms of broking firms can be well worth knowing. Some outfits seem to have the Midas touch when it comes to IPO and capital raising performance, and we rank the best with the also-rans in this edition.

We update readers on activities at Probiotec and Biodiem and discuss the prospects of corporate developments at Alchemia.

On a different note, we report on a presentation given by the CEO of Acrux, Richard Treagus on the topic of partnering.

The editors
Companies covered: ACL, BDM, PBP

	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 (May '06 - May '07)	17.3%
Year 7 (from 4 May '07)	-0.4%
Cumulative Gain	**225%**
Av Annual Gain (6 yrs)	**26.8%**

Bioshares is published by Blake Industry & Market Analysis Pty Ltd. The company also provides market and company analysis of the Australian pharmaceutical and biotech industries for local and international funds management institutions, venture capital funds and other related industry groups. For further details contact David Blake (see details below).

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Analysis: Stockbroker & Investment Bank Performance 2006

For the third year now we judge the performance of stockbrokers and investment banks that specialise in the Australian biotech/life science sector. Biotech companies need to continually raise money to fund their commercialisation activities and stockbrokers and investment banks play a vital role in bringing together biotech companies with investors prepared to support these activities in exchange for an investment return in the future.

To calculate the performance summarised in the table below, we looked at funds raised through these financial brokers in the previous year (2005) to the year when the performance is judged (2006) where funds have been raised through follow-on placements and initial public offerings in 2005. We also consider the performance of the brokers from IPOs supported in 2006 where they were the lead underwriters or sponsoring broker. The broker performance is judged only where more than two fund raisings have been conducted by that broker over the relevant period.

2006 Results

The standout performance over the year was by Queensland investment bank and stockbroker **Wilson HTM**. The four stocks that company raised funds for increased by an average 76%, with IPOs from **CathRx** and **Universal Biosensors** making up the majority of the contributions to those gains. Wilson HTM has become a committed player in the biotech sector, supporting quality biotech companies that look to raise funds at the upper end of the spectrum for the sector. It's the second year in a row that Wilsons HTM has topped this list, generating an average 28% return the previous year.

Lodge Corporate Services finished in the top two for the third year running, delivering an average gain of 47% for the year from four companies it has helped raise funds. Lodge's position and commitment to the sector has helped it attract the respected biotech analyst, Matthijs Smith, to join the group this month.

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Performance of life science/biotech investment banks and stockbrokers in 2006

Supporting broker/investment bank	Av. Gain/loss over CY2006
Wilson HTM	76%
Lodge Corporate Services	47%
BBY	22%
Bell Potter Securities	-1%
Intersuisse Corporate	-2%
ABN Amro Morgans	-3%
Taylor Collison	-15%
EG Capital	-19%
Blackwood Capital	-34%

Broker/Investment bank biotech stock performance 2006

Company	Supporting broker/Inv. bank	Gain/loss in 2006
Universal Biosensors	Wilson HTM	124%
CathRx	Wilson HTM	107%
Pharmaxis	Wilson HTM	43%
Peplin	Wilson HTM	30%
Evogenix	Lodge Corporate Services	118%
Mesoblast	Lodge Corporate Services	55%
Antisense Therapeutics	Lodge Corporate Services	11%
Cellestis	Lodge Corporate Services	4%
Polartechnics	BBY	138%
Metabolic Pharmaceuticals	BBY	79%
Phosphagenics	BBY	39%
Colltech	BBY	20%
Avantogen	BBY	-54%
Norwood Abbey	BBY	-88%
Virax	Bell Potter Securities	31%
IMI Medical	Bell Potter Securities	14%
Benitec	Bell Potter Securities	-49%
Sunshine Heart	Intersuisse Corporate	40%
Optiscan Imaging	Intersuisse Corporate	28%
Anadis	Intersuisse Corporate	-27%
Agenix	Intersuisse Corporate	-48%
Peplin	ABN Amro Morgans	30%
Avexa	ABN Amro Morgans	5%
Genepharm Australasia	ABN Amro Morgans	4%
Ventracor	ABN Amro Mrogans	-3%
ChemGenex Pharmaceuticals	ABN Amro Morgans	-4%
Tissue Therapies	ABN Amro Morgans	-23%
Alchemia	ABN Amro Morgans	-33%
Cogstate	Taylor Collison	91%
Biosignal	Taylor Collison	-8%
Living Cell Technologies	Taylor Collison	-12%
Probiomics	Taylor Collison	-19%
Neuren Pharmaceuticals	Taylor Collison	-25%
Prima Biomed	Taylor Collison	-46%
Select Vaccines	Taylor Collison	-83%
Progen Industries	EG Capital	108%
Life Therapeutics	EG Capital	-4%
Heartware	EG Capital	-11%
Visiomed Group	eG Capital	-43%
Clinical Cell Culture	eG Capital	-57%
Biolayer	EG Capital	-57%
Acuron	EG Capital	-66%
Apollo Life Sciences	Blackwood Capital	-8%
Atcor Medical	Blackwood Capital	-60%

BBY Stockbroking had a bad year in 2005 although has turned its performance around last year with an average 22% return in companies it had helped raise money. Strong performances from **Polartechnics** and **Metabolic Pharmaceuticals** delivered much of the gains.

ABN Amro Morgans continues to work with quality biotechs although gains from companies it raised funds for were relatively flat. **Taylor Collison's** result was disappointing last year, perhaps reflecting the company's focus on the mining sector which is delivering spectacular returns in many cases.

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Probiotec – Fundamentally a Strong Business

Probiotec (PBP - $1.08) is a manufacturer, marketer and distributor of complementary medicines and over-the-counter pharmaceuticals. Its products include the Milton range of cleaning products (acquired through the purchase of Milton Pharmaceuticals from Agenix), the recently released osteoarthritis product developed in-house, called Arthro-Flex Max, and a natural weight loss product called Medislim. It also offers contract manufacturing of pharmaceuticals, tablets, gels, creams and lotions. This part of the business was acquired through the purchase of **Pharmaction** from **Eiffel Technologies**. It also sells a range of feed additives and that business originated from an earlier acquisition.

Probiotec's share price has softened recently following the resurfacing of an old litigation claim against the company dating back to 2004 from a venture in which Probiotec held only a minority interest. The matter relates to a facility Probiotec rented to a third party for bottling a particular product. Initial provisioning by Probiotec was $100,000 although its liability may now be as high as $5 million, with the majority of that being court costs. This is a one-off cost to Probiotec and the company is appealing a recent decision against it. It is also commencing action against its former legal representation.

Probiotec remains a strong business that is on track to deliver a net profit of around $4.3 million this year. Strong growth is expected to continue from the development of in-house products, as the company continues to leverage from its existing infrastructure and as it continues to acquire existing brands.

Probiotec is capitalised at $50 million and based on forecast profit for the current year (excluding one off litigation costs) is trading on a prospective PE ratio of 11.6 .

Bioshares recommendation: **Buy**

Biodiem – Leverages Core IP Asset

Biodiem's scientific team in St Petersburg, Russia, have completed a Phase I safety study in 20 healthy volunteers with a new influenza vaccine for potential protection against avian bird flu. The results showed that Biodiem's vaccine produced an antibody response of between 50% - 65%.

The company's scientists have mixed its live attenuated strain – the H2N2 virus that is being used as the basis of it seasonal flu vaccine program with **Nobilon** (**Akzo Nobel**) – with a non-pathogenic avian flu strain, H5N2.

This approach potentially allows the company to produce a safe influenza vaccine that does not need to be developed within high-level security facilities. The vaccine may also give broader protection against minor changes in the circulating H5N1 bird flu.

This is an additional approach to the vaccine work being undertaken with the US Centers for Disease Control and Prevention (CDC) started in August last year for a human vaccine against the H5N1 bird flu.

Further clinical trials with this vaccine will be conducted in Russia later this year. Commercialisation rights to the technology are shared between Nobilon and Biodiem.

World's most serious health threat

The possibility of the circulating avian H5N1 influenza virus mutating to allow person-to-person transmission remains the world's most serious health threat, according the World Health Organisation. A WHO director suggests it is just a matter of time when the circulating bird flu strain will acquire the capability for person-to-person transmission.

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It appears to be a useful service for Australian biotech companies and others to consider.
For more details contact Marissa on marisa.stoeckel@vatit.com.au or 03 9645 2277.

(This is not a paid advertisement. We simply thought it might be a useful information for subscribers, many of whom travel overseas. - The Editors)

Biodiem - from previous page

Considerable efforts globally are being made to develop human vaccines against the deadly H5N1 strain. In particular, the ability to produce vaccines quickly and in sufficient quantities through cell culture methods are on the top of the priority list. Biodiem, through its partner Nobilon (which is in the process of being acquired by **Schering-Plough**) is developing a cell culture based manufacturing method for a H5N1 influenza vaccine (as are several other groups) through a cooperative R&D agreement with the CDC. It is also developing a cell culture produced vaccine against seasonal flu that is expected to enter clinical trials late next year.

Currently there are vaccine manufacturing capacity shortfalls that are urgently being addressed by groups such as Biodiem/Nobilon. The other potentially significant advantage of the live attenuated influenza vaccine (LAIV) approach is that because this is a live and not killed vaccine, it may offer broader protection against antigenic drift (small changes in the influenza virus strain) and it has shown to provide herd immunity, where the level of infection in the unvaccinated community also falls.

Bioshares recommendation: **Speculative Buy Class A**

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Alchemia's Options

Alchemia (ACL: $1.095) released interim results for the Phase II trial of its oncology candidate HyCAMP, on April 27, 2007. HyCAMP is a formulation of two approved compounds, hyaluronic acid and irinotecan (trade name - Camptosar). The interim results indicated that HyCAMP had a positive effect in extending progression free survival for patients experiencing metastatic colorectal cancer, compared with patients in the control arm who were administered irinotecan alone.

Full trial results are expected to be released by the end of May. These full results would be expected to include response rates, change in CEA levels (a cancer biomarker), median survival, and time to treatment failure.

Following on from the release of these interim results of its Phase II trial of HyCAMP, Alchemia is now contemplating what its next move or moves will be with respect to HyCAMP and the associated HyACT platform.

Alchemia Oncology Inc ?

One possibility is that Alchemia will establish a US based entity, which for discussion purposes could be called Alchemia Oncology Inc (AOI). There are several arguments for establishing a US based company in which Alchemia holds an interest and which houses the company's oncology assets.

While Alchemia may successfully partner HyCAMP to a marketing and development partner for the North American market, Alchemia needs to make plans to assume that this may not even-

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Maximising Value Through Partnering

The BioMelbourne Network holds monthly breakfast meetings for members and guests. These breakfast meetings canvass many issues facing biotech companies. Recently the CEO of **Acrux**, Dr Richard Treagus, addressed the meeting on the topic of partnering. Acrux has struck deals with **CSL**, **Elanco**, **Vivus** and more recently **KV Pharmaceuticals** and **Organon**.

Partnering, or the need to partner, is a fact of life for many biotech companies and investors can benefit from learning about what separates 'good' partnering activities from the 'not so good'.

Focus is on the product

Treagus introduced his presentation by initially discussing the concept of 'the product', and how creating value occurs by thinking of technology as product and how to build value into a product. He suggested that a technology only becomes a commercially viable product once it is in the hands of a committed partner with established marketing and distribution capability.

At Acrux, Treagus said they have adopted an outcomes-focused approach, where the management focus is on the product rather the technology alone. "It is very easy for the scientists to get caught up in the dogma," he said. Furthermore, it is products that deliver patient benefits and satisfy unmet needs, not the technology.

This means that the challenge (for a biotech company) is to think about the 'front end' of the business. And hence, commercial and marketing skills are a vital component of the product development team.

Product differentiation

At Acrux, a guiding question that is asked is what difference is a proposed product going to make compared to the current treatment modality? And added to that are the questions of whether there is incremental value to be obtained in efficacy, safety, patient utility, product presentation and patent position. Differentiation can also apply to IP issues. In other words are potential partners being offered a different patent position, which may for example contribute to life cycle management of existing products by increasing their patent-protected life in the market? Treagus emphasised that it is important that these values are infused early in the product development process.

The Target Product Profile

At Acrux, resources are devoted to market analysis to understand trends and competition in order to inform the R&D strategy. This also flows through into the company's financial plan, so that what Acrux invests in is a product (as opposed to research). The core to this is a debate on what is called the 'Target Product Profile' (TPP) a discussion, for example about the formulation, dose, cost of goods and other elements of a potential pharmaceutical product. Such a process focuses the mind of the research department. "They get relevance!"

The Minimum Product Profile

Treagus said that while the TPP guides what they do, the company also works to a Minimum Product Profile. "It is a useful tool to kill a project, as projects can get a life of their own and seem to go on forever."

Generating value

Acrux aims, Treagus said, to generate value through three different areas including products, partners and people. To adopt a simple phrase, the goal is "more product, more partners". "Our business is focused on licensing out products and getting upfront payments, royalties and milestone payments."

In discussing the company's product development and partnering to date, Treagus said that Acrux had some terrific partnering experiences and some not so good experiences. However, a positive admission he made was that "while our core competency is delivering drugs through the skin, we have now developed a competency in partnering".

The Right Partner

Treagus addressed the all-important issue of determining the right partner. In his view, a potential partner should demonstrate a deal track record and show an appetite for a deal. Potential partners must also have adequate funding, appropriate expertise and an ability to execute. "This is where the rubber hits the road." He also said it was important to look for strategic and cultural alignment early on. Likewise, getting endorsement from senior levels is important. While it is good to connect with junior teams in a partner organisation, it matters that the upper levels are across the arrangement and that the board (of the partner organisation) is involved with the discussions. Another important consideration is to understand where the product might fit in a partner's product line up and understand how important that product might be.

It is also important for biotech companies to not lose sight of performance criteria and remedies. Small company-large company partnering discussions are often built around a 'David and Goliath' dynamic, so it is important to move to a level playing field as soon as possible and reach a point of mutual recognition and respect.

Opposites Attract

The Acrux CEO contrasted the positions of pharma partners (larger firms with a marketing capability) with biotech firms (smaller product origination firms). Where pharma partners are market experts who see products in cost based terms, biotech firms are technology experts who see products in value based terms. Pharma partners are (often) cash-rich 'term setters', whereas biotech firms are cash-poor 'term acceptors'.

The Real Decision Makers

Pharma partners are complex decision makers whereas biotech firms make decisions more rapidly. In this regard, as the CEO of a small biotech firm, Treagus said he posed the following question to himself: "First I ask, who are the decision makers in a larger

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Treagus - cont'd

pharma company? Then I ask myself who are the *real* decision makers in a larger pharma company? The question is, who in that organisation has the capacity to gazump the deal?". The implication, he said, is that diligence is required in monitoring partnering discussions.

The Deal Process

Treagus discussed a number of elements of the deal process. A primary consideration is the need to establish 'deal tension'. Another consideration is to identify a partner's value drivers and discover where the value is embedded for them. Promotion of a product's points of difference is necessary. And while a biotech company may never take a product all the way to market, demonstrating a clear path to market matters. With partners, Treagus said if you show them the dots, all they have to do is know where to join them. Another element of the deal process includes learning to read and respond to the culture of the partner firm.

Test the boundaries

On a different tack, he also suggested that it is important to test the boundaries (of a partnership discussion) early on. This may aid in preventing the creation of a poor deal. "A lousy deal is worse than no deal. Remember you have to stand up in front of shareholders to justify the deal". In addition, a poor deal sets a precedent. Another tactic is to push a deal right to a particular end, and then pull back. If a partner wants the deal, they will often recognise such a tactic as a sign of good negotiation.

Treagus recommended that negotiations through intermediaries be limited, because "people do deals with people!" Another necessity is to keep communications clear and consistent, a discipline that builds respect.

Build momentum

Other suggestions for biotech companies engaged in partnering discussions were firstly, that they should build momentum from the beginning and secondly, that they not allow themselves to be intimidated by larger pharma partners. Such partners who are flush with cash can bear down with the demand to "take the deal!". However, a tactic to consider if pushing back from such pressure is to offer an alternative solution. Companies should also avoid going back into a negotiating loop while in the contract phase. The incorporation of sensible dispute resolution should be attended to.

Get a financial commitment

Treagus' final point was that biotech companies should get a financial commitment on the signing of a deal. The requirement is to make sure that strong alignment is created and a good way to do that is to get a large pharma company to part with some cash.

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Alchemia - from page 4

tuate in the short term. This would mean that the company needs to begin developing a Phase III development plan for HyCAMP, including the design and funding of Phase III trials.

Establishing a US based presence which includes project managers, a clinical and regulatory team, and with leadership provided by an executive team that includes a Chief Medical Officer would be far more achievable in a short space of time, given the depth of the biotech labour market in the US. And at the moment, Alchemia has no internal clinical stage development skills at its disposal.

Establishing a US clinically-focused management team and a US corporate identity is more likely to, on balance, enable necessary funds to be raised to support the development of HyCAMP and other potential oncology products developed using the HyACT platform.

Currently, Australian investors may be less willing to support a fundraising by Alchemia seeking in the order of $50 million to support a Phase III clinical trial and other activities with a wait period of two-to-three years before an interim result becomes available. And at its current share price, the local dis-incentive towards such a fund raising is that, with the company's capitalisation sitting around $150 million and share price of $1.10, it would be extremely dilutive.

Investors are more likely to support a smaller fund raising by the company to enable it to meet working capital requirements and to support development of the company's novel chemistry platform. Australian investors have so far been dis-interested in the HyACT technology and US investors could well be more disposed to the technology and its emerging possibilities stemming from the recently completed Phase II trial.

A Positive Move

The formation of Alchemia Oncology Inc could be seen as a very positive move by the company as it would address one aspect of the company's capital requirements. While Alchemia may only retain a minor stake in AOI, the opportunity for Alchemia to gain a reasonable return over the long term could make the proposition worthwhile. To date, the example of **Peptech**'s investment in **Domantis**, which yielded a five-fold return, supports the occasional strategy of biotech companies building and retaining investments in spinouts or related firms.

Alchemia is capitalised at $154 million and held $13.6 million in cash as of March 31, 2007. On the basis of its annualised net operational cash outflows for the nine months ending March 31, Alchemia has funds sufficient to last one year of operations. We have retained our **Hold** recommendation on Alchemia pending the company's release of the HyCAMP full trial results and pending announcement of corporate development and funding plans.

Bioshares recommendation: **Speculative Hold 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

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