In this edition...

Private equity and local and US venture capital are rapidly expanding their interest in the Australian biotech sector. Vision Systems last year showed us that capital markets fail to understand Australian biotech. With VC and private equity now circling the local sector, investors can take comfort that finally value is becoming better recognised in Australia which over the next few years should improve investment outcomes.

In light of this, we update readers on developments at Chemgenex Pharmaceuticals and Peptech. We also introduce readers to new company worth becoming familiar with, Probiotec, which listed on the ASX late last year.

The editors

Companies covered: ACL,CXS,IDT,

MSB, PBP, PTD

	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)	23.1%
Cumulative Gain	243%
Average Annual Gain	27.7%

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).

Blake Industry & Market Analysis Pty Ltd ACN 085 334 292 PO Box 193 Richmond Vic 3121 AFS Licence No. 258032

Enquiries for *Bioshares* Ph: (03) 9326 5382 Fax: (03) 9671 3633 Email: info@bioshares.com.au

David Blake

David Blake Ph: (03) 9326 5382

Email: blake@bioshares.com.au

Mark Pachacz Ph: (03) 9671 3222

ISSN 1443-850X

Email: pachacz@bioshares.com.au

written consent of the publisher.

Individual Subscriptions (48 issues/year) \$320 (Inc.GST) Edition Number 203 (9 February2007)

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9 February 2007 Edition 203

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

Private Equity Circles Australian Biotech

A common statement made in Australian biotech circles has been that Australian biotech stocks trade at considerable discounts to overseas counterparts, particularly to those in the US. There has not been sufficient evidence produced previously to confidently support this argument. However the escalating interest from international investors and venture capitalists in Australian biotech over the last 12 months provides some clarity on the issue.

Overseas interest in Australian biotech stepped up considerably last year when a large US venture capital firm specialising in the biotech area, **MPM Capital** from the US, invested approximately \$23 million in **Peplin**. This was followed by the bidding war for **Vision Systems** which end in the company being sold to **Danaher Corporation** for more than a 100% premium at \$814 million. Last year there were five local listed biotechs acquired by overseas firms.

Also last year **Clinuvel** raised \$41 million with \$20 million coming from European institutional investors. This week venture capital group **GBS Ventures** teamed up with a US biotech VC firm, **Alta Partners** and other investors to acquire an 18.5% stake in **Chemgenex Pharmaceuticals.** These investors have also agreed to take part in a \$21 million capital raising. Another sign that the local sector remains undervalued in parts is the entry into listed equities by VC firms. Late last year local VCs, GBS Ventures and **CM Capital**, agreed to invest \$15 million in Sunshine Heart.

This week, **Peptech** announced that it is in discussion with private equity groups regarding privatisng the company. There have been very few private equity deals worldwide in the biotech space. The interest from private equity players suggests that once again public markets are failing to fully appreciate and understand biotech investment in Australia. In the words of Peptech's CEO, John Chiplin, "if public markets can't recognise value in listed companies, then private equity will come along and extract it".

Peptech provides an ideal vehicle for private equity, with \$186 million in cash, an expected royalty stream over the next four in excess of \$100 million, and a business model based on rapid expansion and value creation through M&A, together with developing Peptech's underlying assets.

Any private equity deal will require shareholder approval and would likely take place at a share price premium, which explains the 19% surge in the company's share price this week. If Peptech is privatised, it's expected that the company's aggressive M&A plans would continue, and the company would potentially re-list in three to five years time.

Bioshares

Probiotec - Creating Value from Distressed Businesses

Probiotec Ltd (PBP: \$1.12) listed on the ASX in November last year at \$1.00 a share. Ignore the name as this company has little to do with probiotics. Probiotec is an agglomeration of manufacturing businesses in the area of complementary medicines and over the counter (OTC) pharmaceuticals. Since the trading company was formed eight years ago, it has acquired several manufacturing businesses – some of them well known to Bioshares readers – and grown the company into a profitable and well managed enterprise.

Financials

Probiotec is capitalised at \$52 million. The company is forecasting a net profit this financial year of \$4.3 million, although the figure is expected to be closer to \$6 million using carried forward tax losses which should also not see any tax paid in 2007. In FY2006, the company made a pre-tax profit of \$3.0 million. It is trading on a prospective 2007 PE of 12 if tax loss benefits are ignored.

Probiotec raised \$17 million upon listing. Of that amount, \$12 million was a sell down by existing shareholders, primarily private equity investor **CVC Ltd**. The company's proformer accounts at 30 June 2006 showed the company had borrowings of \$21 million with \$5 million in cash and financial assets.

Background - Business acquisitions

Probiotec was established in 1997 by the current CEO, Wayne Stringer. In 1997, the company bought a functional foods and nutraceutical business that made and sold products such as calcium supplements and body building protein formulations. The following year it acquired the molasses producer which now sells a range of other feed additive ingredients such as calf milk replacers and other equine foods.

In 2003, the trading company acquired **Pharmaction Pty Ltd** through a distressed sale from **Cottee International**. Long-time readers of Bioshares may remember that the Pharmaction business was sold to Cottee by **Eiffel Technologies**, which was formerly named Pharmaction Holdings. The Pharmaction business was essentially a contract manufacture of OTC and pharmaceutical products for the local and international pharmaceutical sector. This business continues under Probiotec. The Pharmaction site in Melbourne is now the head office for Probiotec. As the business had gone into liquidation, there were few incumbencies included with the acquisition.

In 2005 the company made its most recent acquisition, purchasing the **Milton Pharmaceuticals** business from **Agenix Ltd**. Milton manufactured and sold around 260 healthcare and nutraceutical goods, from the vitamin supplements to the well known Milton sanitizing product range. Probiotec has since improved profitability substantially, closing the Brisbane site and incorporating the manufacturing into its Melbourne facility.

The company generates value from not only acquiring distressed businesses and introducing manufacturing efficiencies, but it also seeks to leverage from those businesses by introducing new products. For instance it has recently released a Milton hand gel, also a new product for osteoarthritis, called Arthro-Flex Max, which is a combination of available OTC ingredients glucosamine and chondroitin. Probiotec was able to manufacture the product as a dissolvable powder (rather than multiple daily tablets) to create a point of difference. The products are sold through a sales network of 12 people to major supermarket chains and half (2400) of the pharmacy stores in Australia.

In 2002, the company formed a joint venture with **Dairy Farmers Australia** which extracts lactoferrin and immunoglobulins from whey for neutraceutical products. The company has released several products from this JV, more recently Immune Plus that is taken to strengthen the body's immune system. **Blackmores** has now followed Probiotec into this market. Growth will also come from sales into Asia, with products now being sold into China, Singapore and Malaysia.

Successful business model

The value creation philosophy of company has been to purchase distressed businesses, merge the businesses together and generate efficiency improvements from increasing scale and applying better management. Its strength is also in the rapid development of new products, which it can manufacture in its accredited facilities and sell through its established distribution network.

The reason Probiotec has been successful in running these underperforming assets is not only due to timely acquisitions, but also due to the strength of its management. The company's CEO was formerly a chartered accountant who has introduced strict business disciplines into Probiotec. In what has the hallmarks of becoming a successful family-run business, Stringers three sons now hold management roles within the company, bearing some similarity with the highly successful **Arrow Pharmaceuticals** (acquired by **Sigma Pharmaceuticals** in 2004), in which the father and son team of David and Paul Duchen played a prominent role.

Summary

Running a successful generics pharmaceutical or OTC product business is all about execution and the ability to rapidly respond to market trends and needs. Probiotec so far has shown itself to be very competent on both levels and further strong value creation can be expected with this company.

Bioshares recommendation: Buy

Bioshares

ChemGenex Attracts Leading Biotech Investors

The share register of ChemGenex Pharmaceuticals changed considerably this week when substantial shareholder Charter Pacific sold its holding of 21.8 million shares (an 18.5% stake) to two biotech venture capital investment groups, **GBS Ventures** from Melbourne and **Alta Partners** from San Francisco, and other investors. The value of this 18.5% stake was \$17.4 million. GBS Ventures and Alta Partners and other investors have also invested, through a placement, a further \$10.5 million.

We estimate that ChemGenex's cash reserves now total \$19 million. This cash position should be further strengthened through a rights issues that may raise up to \$10.5 million.

ChemGenex's lead program is the development of Ceflatonin as a potential treatment for several blood-based cancers including chronic myeloid leukemia (CML), myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML).

We have conducted a probability adjusted valuation of Chemgenex's Ceflatonin on the basis of the sole indication area of T315I resistant CML. Over the last six or so years, **Novartis'** Gleevec (imatinib) has been tremendously successful in treating Philadelphia chromosome positive CML. However, the development in treated patients of mutations of a kinase protein known as BCR-ABL has created a new treatment challenge. While there are upwards of 40 mutation 'points', the T315I 'location' is one of the most common.

In trials conducted so far, Ceflatonin appears to be able to successfully treat CML. However, it is in the area of BCR-ABL kinase mutations that a significant commercial opportunity has emerged, with Ceflatonin able to treat CML where resistance to Gleevec has arisen, and which may also limit other BCR-ABL inhibitors such as nilotinib and dasatinib (Sprycel - **Bristol Myers Squibb**).

The valuation is done in a manner more in keeping with break-up valuation methodologies, in which specific assets are valued in preference to full valuations of the firm. The approach is relevant in the world drug development assets which are bought and sold or licensed or in-licensed on a simpler asset valuation basis.

Valuation assumptions

- Discount rate 12%
- Probability of meeting clinical endpoints 0.9
- Probability of registration in the expected time frame 0.7
- Overall probability of reaching market- 0.63 (0.9 x 0.7)
- Percentage of CML patients with resistance to Gleevec 20%
- Percentage of CML patients with resistance to Gleevec with the T315I mutation – 25%
- CML Patients Europe 41,000
- CML Patients Europe Underlying Growth Rate 0%
- Annual new patients Europe 4,500
- Annual deaths Europe 500
- First Year No. Pts Treated Europe
 – 500
 (thereafter 0.2 x 0.25 x CML pt pool)

- CML Patients USA 40,000
- CML Patients USA Underlying Growth Rate 0%
- Annual new patients USA 4,500
- Annual deaths USA 500
- First Year No. Pts Treated USA 500 (thereafter 0.2 x 0.25 x CML pt pool)
- (Global) Price Annual Treatment Ceflatonin US\$40,000
- Gross Margin 70%
- USA Sales commence in 2008
- Europe Sales commence in 2009
- DCF period concludes in 2015 (matching the expiration of the USA orphan drug exclusivity period)
- Terminal Value None
- No. Shares (fully diluted) 213 million

Competition assumption

We have assumed that no competitor will appear to take sales from the Ceflatonin T3151 indication. At this point in time, we think that Ceflatonin is positioned very strongly to capture and maintain a market segment. Several other drugs are in development but look to be unlikely to get to compete because of inferior dosing characteristics or because they lag Ceflatonin in the development stakes by too many years and will struggle to enter an entrenched market covered by an orphan drug designation.

Valuation

Using these assumption we have ascribed a fair value to Ceflatonin (CML T315I indication) of US\$264 million, or \$338 million. On a per share basis, this amounts to \$1.60. Assuming Ceflatonin (T315I indication) development costs are in the order of \$20 million, then ChemGenex shares are valued at \$1.80 if remaining cash from funds to be raised and executed options are included, but exclusive of other assets.

The results of this valuation are helpful in understanding why two well known venture capital firms have chosen to invest in ChemGenex. Importantly, what this valuation does NOT take into account are sales of Celfatonin outside the USA and Europe, the potential use of Celfatonin in other cancers, other drugs under development and none of the other drug discovery assets held by the company. These other components of the ChemGenex asset base represent further blue sky for ChemGenex investors. We have also conservatively ended our DCF in 2015 when Orphan Drug status in the USA for Celfatonin expires.

Recommendation: Speculative Buy Class A

Bioshares

IDT - Cause for Revision

We covered IDT (IDT: \$1.88) last week and indicated that a recent announcement by the company suggested that the strong growth forecast when the full year results were released last year may not be met. IDT had mentioned recently that it expected its first half result for this financial year to be broadly in line with the trend in results over the same periods in 2002, 2003 and 2004. Over this time, net profit was \$2.1 million, \$2.0 million and \$2.0 million respectively.

Discussions with management this week suggests that strong growth (double digit) can in fact be expected, in line with guidance provided earlier last year. Bioshares has upgraded its recommendation to **Hold**, and will be revised when half yearly results are released over the coming fortnight. An expanding relationship with **Pfizer** is expected to help deliver on the strong growth forecast over the longer term.

Bioshares

Mesoblast - Cause for Concern

Mesoblast's founder, Executive Director and Chief Scientific Advisor, Silvui Itescu, today sold \$12.9 million of stock in the company. Whilst he retails 37 million shares in the company, in the view of this publication, it is very concerning when executive directors developing speculative technologies that have yet to be commercialised sell down shares in companies they are promoting. This has occurred in the recent past, with sell downs made by the former CEO of Clinuvel, Wayne Millen, and by the founders of Cellestis. While the Mesoblast trade was conducted off market, with the shares placed to institutional investors (unlike the Clinuvel shares which were sold on market), this practise has a negative impact on the overall Australian biotech sector and risks tainting the local sector, impacting the future access to capital markets that are critical to the existence of this industry. Whilst the underlying value of the technology remains unchanged, expect some price weakness with the stock.

Bioshares

Bioshares recommendation: Sell

Alchemia – Arixtra Sales Accelerate

Alchemia (ACL: \$1.105) is developing a generic version of GlaxoSmithKline's anti-coagulant drug Arixtra (fondaparinux).

GlaxoSmithKline reported its full year results for 2006 overnight. Finally there are signs emerging that Arixtra sales are beginning to accelerate. For the three months ended 31 December 2006, Arixtra generated global sales of US\$40 million, a 67% increase over the 2006 September quarter. Annualised sales are now tracking at \$US160 million a year, or \$88 million in the US. Over the 12 months, Arixtra sales increased by 143% in 2006 over 2005 to US\$107 million worldwide.

The implications are that there is substantial more growth in this product. Arixtra is competing against Lovenox, which generated sales of US\$3.7 billion. Alchemia is developing the only generic (at this stage) version of Arixtra, which is due to be filed for

registration at the end of 2007. Under new FDA guidelines released by the FDA, first to file generics in the US can expect drug marketing applications to be assessed in six months, which may see Alchemia's drug on the market in the US as early as mid 2008.

Another implication of this changed market condition is that the ability for Alchemia to find a marketing partner in the US is substantially improved, as should the terms upon which such a contract may be negotiated, in favour of Alchemia.

Alchemia is capitalised at \$155 million and held cash of \$16.5 million as of December 31, 2006.

Bioshares recommendation:

Speculative Buy Class A

Bioshares

Bioshares Model Portfolio (9 February 2007)

Company	,	Price added to
		portfolio
Acrux	\$1.03	\$0.83
Alchemia	\$1.19	\$0.67
Bionomics	\$0.29	\$0.21
Cogstate	\$0.21	\$0.18
Cytopia	\$0.67	\$0.46
Chemgenex Pharma.	\$0.70	\$0.38
Optiscan Imaging	\$0.52	\$0.35
Metabolic Pharmaceuticals	\$0.88	\$0.53
Neuren Pharmaceuticals	\$0.59	\$0.70
Peplin	\$0.76	\$0.83
Peptech	\$1.85	\$1.31
Phylogica	\$0.40	\$0.42
Prima Biomed	\$0.050	\$0.09
Probiotec	\$1.12	\$1.12
Progen Industries	\$6.75	\$3.40
Sunshine Heart	\$0.21	\$0.19
Ventracor	\$0.91	\$0.92

Portfolio Changes

Evogenix has increased by 80% since it was added to the portfolio. We will take profits and remove the stock this week at 85 cents. And we have added Probiotec at \$1.12, on which we have initiated coverage in this week's edition.

The Bioshares 20 Index

Change from June 30, 2006	47.2%
Change from Dec 31, 2006	16.6%
Change - week ago	-0.5%

Nasdaq Biotech Index

Change from June 30, 2006	10.4%
Change from Dec 31, 2006	2.7%
Change - week ago	-0.4%

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

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Subscription Rates (inc. GST)

48 issues per year (electronic distribution): \$320

For multiple email distributions within \$520 2-3 email addresses the same business cost centre, our \$620 4-5 email addresses pricing structure is as follows: \$750 6-10 email addresses

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