

**In this edition...**

A reassuring feature of the Australian biotech sector is the depth and spread of medical technologies being developed, with classic drug development only one facet of the sector. In this edition we focus on two companies that exemplify this diversity, including Acrux and its metered dose transdermal drug delivery technology and Xceed Biotechnology's investee company Polynovo. Polynovo's polyurethane compounds are being evaluated for their potential in wound management, cosmetics, bone repair and as biodegradable stents. Xceed is planning to demerge Polynovo and undertake a separate listing for it in the coming months.

**The editors**

**Companies covered: ACR, PEP, XBL**

	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)	-6.7%
<b>Cumulative Gain</b>	<b>205%</b>
<b>Av Annual Gain (6 yrs)</b>	<b>26.8%</b>

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# Bioshares

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

## A Blockbuster Week for Australian Biotech

The week ending August 10, 2007 was a blockbuster week for Australian biotech firms. A bevy of company announcements were released that demonstrated that the sector is alive and well and progressing better than expected by many observers, even exceeding *Bioshares* expectations in several instances. Several noteworthy events of the week are listed below.

### Biota Posts a Profit of \$20 million

Sector stalwart **Biota** posted a \$20.2 million profit for the FY2007, with profitability stemming from growth in royalties from Relenza sales. Relenza royalties were \$38.8 million for FY2007 compared to \$5.2 million in the previous year. At the same time the company announced its cash reserves had increased to \$62 million, higher than our recent estimate of \$55 million. The company is now in a comfortable position financially, and is able to both support its drug discovery and development programs and its litigation with **GlaxoSmithKline** without recourse to shareholders for funds. Potential upside for the stock exists in the form of the company winning its suit against GSK, for which the company has re-specified damages of \$564 million-\$704 million, and from ongoing influenza drug stockpiling as well as re-stockpiling.

### Evogenix Shareholders Agree to Peptech Merger

In a vote that was far from certain, **Evogenix** shareholders voted to merge with **Peptech**. Under the scheme of arrangement process for managing the merger, more than 75% of shareholders were required to agree with the proposal. This merger offered 15 cents in cash for each Evogenix share in addition to roughly half a Peptech share. The proposal goes to court for ratification on August 17. This decision indicates a degree of maturity beginning to pervade the local sector.

### Peplin to Redomicile to the USA

In a first for an Australian biotech, **Peplin** announced a proposal to redomicile its principle corporate entity into the USA, with the Australian entity to be delisted and become a subsidiary of Peplin Inc. The US entity is expected to seek a Nasdaq listing. Once the proposal is approved, shareholders will trade their converted shares as Chess Depositary Interests (CDIs), the same type of instruments that Australian investors in **Resmed** and **Sunshine Heart** hold for example. Peplin also announced a placement of \$20 million, boosting its estimated cash reserves to \$45 million. (*More details on page 4*)

### What's it all mean?

An element common to each of these announcements is cash. Biota has generated royalty income from a real asset, Relenza; Evogenix is merging with a cash-endowed firm in the form of Peptech; and although one of Peplin's aim is to more efficiently access US biotech capital markets its also is aiming to apply that capital to effectively build a specialised sales and marketing force in the US, in a market (dermatological products) in which it has a realistic chance of doing so.

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## ***Xceed to Demerge and Float Polynovo***

Xceed Biotechnology (XBL: 19 cents) has two investments. It owns 100% of Boron Molecular, which manufactures innovative fine chemicals. It also owns 64% of polymer materials company, called Polynovo Biomaterials. This latter investment is rapidly moving from strength to strength which will be reflected in a forthcoming separate listing of Polynovo.

In the last 18 months Polynovo has struck deals with two multi-billion dollar international medical device companies and is currently in negotiations with a third similarly sized medical device group.

### **The Polynovo technology**

The core Polynovo technology is based on the use of a family of polyurethane compounds that have been developed to display various physical and bio-chemical properties, called NovoSorb. These properties can be manipulated to provide a suite of functions particularly useful in biomaterial applications. For instance, incorporating phosphorylcholine into the polyurethane polymer backbone can decrease the level of neutrophil adhesion and lower immuno-inflammatory responses by the body. Adding compounds such as sulfonium zwitterions when making the polyurethane polymer can reduce platelet deposition and increase the degradation rate of the biodegradable polyurethanes.

The result is that these polymer compounds can be manufactured to be implanted into the body with varying and controlled degradation rates, they can display a wide variation in mechanical strength, producing very elastic compounds or rigid bone-like polymers that have high weight-bearing properties, and the range of polymers that have been developed are biodegradable into water soluble non-toxic byproducts. The technology can also allow the gradual and controlled release of pharmaceutical compounds.

### **Polynovo deals to date**

#### **Medtronic deal**

In January last year Polynovo signed a deal with **Medtronic** for the development of two novel types of vascular mesh stents, used to pry open narrowed arteries. The market for these stents is in excess of US\$4 billion a year with strong growth expected in the medium-to-long term.

There are three main players in the stent market: **Johnson & Johnson, Boston Scientific**, and Medtronic, which is capitalised at US\$61 billion. Existing stents remain in the artery and eventually form part of the artery wall as the artery grows over the stent. This overgrowth can lead to restenosis, which is a re-narrowing of the artery. Advances in recent years has seen the advent of drug eluting stents which delays this overgrowth.

Most of the major stent manufacturers have programs in place to develop biodegradable stents. After three to six months of implant, the artery wall section has re-established its mechanical properties and the need for the implanted stent is not only unnecessary but problematic because of the overgrowth of smooth muscle cells referred to above. Drug-eluting stents may stop the overgrowth

problem in the short term but there is evidence emerging that these stents simply defer the problem of overgrowth to a time when the patient is no longer on blood thinning agents and the risk of blockage increases, perhaps explaining the lacking benefit in survival with the drug-eluting stent

Polynovo has been working with Medtronic to develop both a biodegradable stent and a stent coated with biodegradable material that releases drugs to slow restenosis.

It's unclear which stent will reach the market first. Animal trials have been successfully completed and the next stage is to conduct small efficacy trials in around 60 people prior to conducting a major study in around 200 people (estimated) comparing the Polynovo/Medtronic stent with existing stents.

An important part of partnering with a major market player such as Medtronic is not only does it know how to bring the products to market and has existing sales teams, but the product development is continually conducted in conjunction with practising clinicians, with the design reflecting the needs of the market.

The objective is to have the first product on the market in as early as three years (although four to five years may be more realistic) with Polynovo entitled to a high single digit royalty from sales. If product sales could reach US\$500 million a year, it represents considerable future royalty flow to Polynovo.

### **Biomet deal**

In February this year, Polynovo announced its second major deal for its NovoSorb technology. Polynovo signed a global partnering and licensing agreement with **Biomet** (market capitalisation US\$11 billion) to repair torn cartilage in the knee (meniscus) and also for cranial bone repair.

The NovoSorb material is being used as a biodegradable polymer glue that has a light curing feature. The first application with Biomet is to repair the meniscus in knee that has resulted from sports injuries. It will be used as a combination product to treat such injuries in a market that is valued at approximately \$200 million a year.

The NovoSorb glue would seek to replace the use of pins and sutures. The issue with repairing this area is the limited blood supply to the meniscus which results in poor healing. Not only can the NovoSorb product be made biodegradable, but it is believed the degradation process may even stimulate regeneration.

For treatment of facial cranial injuries or deformities, the NovoSorb technology allows the use of biodegradable drapes and glues to be used in the reconstruction procedure that could potentially reduce surgical time substantially in a procedure that currently involves reassembly of sections of the cranium and fixation with pins.

*Cont'd over*

– *Xceed cont'd*

Polynovo received an undisclosed upfront payment from Biomet and will receive high single digit royalties from sales of any products. The first product could be on the market within 18 months and should be regulated through the more straightforward 510k approval pathway with the FDA.

### Third deal – under negotiation

Last month the company announced it was in discussions with a large undisclosed medical device company to license/partner the technology for two orthopedic applications. Spinal fusion and disc repair may be an application under negotiation, as may use of the NovoSorb technology as a bone filler in treating bone injuries or for general fixation using biodegradable screws and plates.

As the company progresses, it should be able to negotiate deals with increasing advantage. The current negotiation has been halted while the demerger of Polynovo from Xceed is conducted. A deal may be completed before year's end.

### Other applications

The appeal of the Polynovo technology is the variety of applications for such a material that lends itself to manipulation to deliver a range of therapeutic uses. In June last year Polynovo formed a joint venture (80/20) with a burns surgeon, Dr John Greenwood in Adelaide, to develop a spray-on biodegradable bandage that contains an anesthetic and anti-infective agents. Another product being developed is a biodegradable wound dressing for severe burns to seal the wound and deliver antibacterial agents. The product would remain on the wound even when skin grafts are placed on the burn site.

### A second joint venture

A second joint venture (80/20) was formed last month to investigate the use of the NovoSorb technology in plastic surgery as a dermal filler in the removal of wrinkles. The joint venture is with two plastic surgeons, Dr Tim Edwards and Dr Tony Moore, who had successfully introduced a similar product to Australia called Sculptra that was eventually sold to Sanofi-Aventis.

### Demerger

Xceed Biotechnology has elected to demerge Polynovo which will be listed on the ASX this year as a discrete business. An underwriter has yet to be elected. Currently the CSIRO owns 36% of Polynovo. Presumably an agreement could not be reached with the main shareholders to roll the Polynovo asset into Xceed Biotechnology, which would have been a cleaner commercial approach if the Boron Molecular business had been sold off.

### Summary

The demerger will involve an in-specie distribution to all Xceed shareholders of Polynovo shares. It's unknown what the listing valuation of Polynovo will be. However, the Polynovo business should be strengthened considerably with additional funds raised. Xceed is currently capitalised at \$19 million.

*Bioshares* recommendation: **Speculative Buy Class A**

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## Peplin Redomiciles to the US and Seeks Nasdaq Listing

In a first for an Australian biotech company, Peplin (PEP: 90 cents) has decided to transfer its assets into a US-based entity, Peplin Inc, and list the company on the Nasdaq market in the US. The company will retain its Australian listing, with shares to trade as CHES Depository Interests (CDIs). The company has also completed a \$20 million placement at 90 cents a share, with **MPM Capital** contributing just over 30%.

There are few downsides for local investors and it's a surprising tack by Peplin, which is seeking to firmly base the business in the US, with future funding expected to be increasingly sourced from the US.

Peplin will begin its final Phase III trials early next year for its skin cancer treatment compound, PEP005. Phase II results have been consistently good, with the company on track to deliver a product to the market that should offer clear advantages over existing treatments. The product is expected to reach the US market in 2010 with Peplin expected to build its own sales force and sell the product directly to US dermatologists. We expect the product, if approved, will generate global sales in excess of US\$200 million a year. The product will be out-licensed or distributors will be appointed in other regions.

Over the last two years, Peplin has been making the transition to the US starting with a US venture capital-based investment round from MPM Capital, followed by the CEO relocating to San Francisco at the start of this year. The company will maintain its Australian operations. According to the company's CEO, Michael Aldridge, the move will allow the company to raise funds more efficiently, placing it on an equal footing with other US-based biotechs.

The company has filed an IPO registration, which at the moment indicates a US\$75 million capital raising. The actual funds to be raised through a US IPO may be more or less than this amount. The offer price of that offering will be conducted through a book build process. The IPO should be completed within 12 months, and could potentially be completed this year although that will depend on a number of factors, including market conditions.

### Implications for the biotech sector.

Peplin has continued to trade at a considerable discount to its fair value on the ASX. If that value can be successfully unlocked by moving to the US, which will allow future funding to be accessed more efficiently, then it will likely create a path for other Australian biotechs in similar positions that want to access US capital markets on an equal footing with US counterparts. Aldridge believes this move will deliver Peplin access to the US more efficiently, more effectively and more completely. Peplin's move to the US is an interesting step and will be somewhat of a test case for Australian biotechs.

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### Bioshares Model Portfolio (10 August 2007)

Company	Price (current)	Price added to portfolio
Acrux	\$1.50	\$0.83
Alchemia	\$0.84	\$0.67
Biodiem	\$0.24	\$0.29
Biota Holdings	\$1.72	\$1.55
Circadian Technologies	\$1.18	\$1.45
Cytopia	\$0.63	\$0.46
Chemgenex Pharma.	\$0.85	\$0.38
Neuren Pharmaceuticals	\$0.34	\$0.70
Optiscan Imaging	\$0.42	\$0.35
Peplin	\$0.90	\$0.83
Peptech	\$1.35	\$1.31
Phylogica	\$0.27	\$0.42
Probiotec	\$1.16	\$1.12
Starpharma Holdings	\$0.38	\$0.37
Sunshine Heart	\$0.16	\$0.19
Tissue Therapies	\$0.53	\$0.58
Universal Biosensors	\$1.30	\$1.23

### Portfolio Changes – 10 August 2007

**IN:**  
No changes

**OUT:**  
No changes

## Acrux – A Core Long-term Holding

Acrux (ACR: \$1.50) has been a stellar performer over the course of 2007, climbing 95% from its closing price in 2006, and it is also up 78% from a year ago. The company’s capitalisation has moved from \$66 million in June 2005, to \$100 million in June 2006, to \$219 million in June this year and as of today stood at \$234 million. While the Acrux story is known to many long-standing readers of *Bioshares*, its worth revisiting this stock because in our view there is more to come from this company and it easily stands as a core long-term holding in biotech stock portfolios.

### History

Acrux is a drug delivery technology company which was founded in 1998 to commercialise technology invented at **Monash University**. The company remained private until 2004, when it listed on the ASX in September of that year. The company raised \$30 million through its IPO and maintained the view that those funds would be adequate for the company to reach profitability. However, the company recently raised \$22.5 million to fund the Phase III clinical trials of the company’s Testosterone Metered Dose Gel product, arguing that the additional value to be obtained from the activity was an extremely attractive proposition and easy to consider following the successful completion of a Phase II study in July.

Since inception the company has now raised approximately \$85 million, but currently holds \$40 million in the bank. This funding position should give the company ample resources to push ahead with its ambition to apply its proprietary drug delivery technology to even more areas, including non-hormone compounds.

### The Acrux business model

The Acrux business model is based on the technology out-licensing model. This is an appropriate model for most drug delivery technology firms that possess a technology that can be applied

many times over. In the areas of human therapeutics, drug delivery technologies are typically out-licensed at mid-to-high single digit royalty rates. It is possible that higher mid-teen rates are achievable where the technology offers significant patient benefits and product extension possibilities. For example, the royalties associated with Acrux’s Evamist product now licensed to **KV Pharmaceuticals** (for the US market) are in the mid-teens (~15%). Such royalty rates are on par with rates obtained by drug developers who license out proprietary molecules. The investment appeal stems from the application of the technology to well understood drugs where the safety profile of the drugs has been established over many years. The Acrux technology offers the royalty upside of new molecule drug but without the risk attached to new molecule drug development.

The corporate structure of Acrux consists of a parent company Acrux Limited, which controls 100% of Acrux DDS Pty Ltd, Fempharm Pty Ltd and Acrux Pharma Pty Ltd and 90% of Cosmeceutic Solutions Pty Ltd. Acrux is obligated to pay Monash University in respect of certain assigned patents a 3.5% royalty of net sales.

### Product Updates

#### Evamist

Acrux’s most advanced product, Evamist, has recently received marketing approval by the US FDA. The product is expected to be made available for US patients from October onwards. Evamist will be marketed by KV Pharmaceuticals, which acquired the product from the original licensee Vivus for a US\$10 million upfront payment followed by a US\$140 million on FDA approval. A US\$10 million milestone payment to Vivus is to be paid when Evamist net (not gross) annual sales reach \$100 million and \$20 million is to be paid when Evamist net annual sales reach \$200 million. KV Phar-

*Cont’d over*

#### Acrux Product Development History

Product pipeline	Indication sought	Prospectus - August 2004		August 2007	
		Stage of development	Partners	Stage of development	Partners
<i>Note: MDTS - Metered Dose Transdermal System</i>					
Estradiol MDTS	Menopausal symptoms	Phase II	Vivus Inc (for USA)	Approved by FDA (Aug 07)	KV Pharm. (USA) Aspen (AU,NZ)
Testosterone MDTS	Female androgen sufficiency	Phase II	Vivus Inc (for USA) CSL (AU, NZ)	Phase II	Vivus Inc (for USA) CSL (AU, NZ)
Fentanyl MDTS	Severe pain	Phase I		Phase I / US IND filed	
Bupirone MDTS	Anxiety related	Phase I		<b>Terminated 2006</b>	
Testosterone MD Lotion	Male androgen sufficiency	Phase I		Phase II completed	
Granisetron MDTS	Nausea	Phase I		<b>Terminated H2-2005</b>	
Oxybutynin MDTS	Incontinence	Pre-clinical		<b>Terminated H2-2005</b>	
Nestorone MDTS	Contraception	Phase I	The Population Council	Phase I completed	
Nestorone + Estradiol MDTS	Contraception			Phase I completed	
Nestorone + Ethinyl Estradiol MDTS	Contraception			Phase I completed	
<i>Undisclosed</i>	Contraception			Pre-clinical/formulation	Organon
Nicotine MDTS	Smoking Cessation	Pre-clinical			
Not Specified	CNS diseases	Pre-clinical			
<i>Undisclosed</i>	Parkinsons disease			Pre-clinical/investigation	
<i>Undisclosed</i>	Hypertension			Pre-clinical/investigation	
<i>Undisclosed</i>	Musculoskeletal			Pre-clinical/investigation	
<i>Undisclosed</i>	Women's health			Pre-clinical/formulation	Organon
Cosmeceutics	Anti-aging skin care		BIE		
Companion Animal Health	Various		Eli Lilly (Elanco)	Phase II	Eli Lilly (Elanco)

– AcruX cont'd

maceuticals must pay the royalties to AcruX. These figures are tangible evidence of the potential for AcruX's drug delivery technology to deliver significant value and investors should note that the figures relate to only one sales territory.

### Testosterone MD-Lotion

AcruX has completed a Phase II trial of Testosterone MD-Lotion and has announced plans to commence a Phase III plan in Q2 2008. AcruX has developed an under-arm gel applicator similar in action to an under-arm deodorant applicator. The patient benefit is that the application is discrete, compared to the current slow-drying gel products, which must be applied by hand to several body regions. The testosterone market is estimated to be worth globally \$600 million and is growing at around 14% per annum.

### Fentanyl

Fentanyl is a pain drug that is administered in a number of forms, including the well known Duragesic patch (Johnson & Johnson). Following a US IND filing, AcruX is planning a Phase I study of fentanyl administered using its Metered Dose Transdermal System (MDTS). The trial will evaluate different doses at three different sites of administration and will commence in the second half of 2007.

### Other products

AcruX has a number of other products in development including a contraceptive MDTS formulation being developed for **Organon** (now part of Shering Plough), another undisclosed product with Organon, and a female testosterone product with Vivus.

It has recently disclosed a number of products in the investigatory stage of development. These are applications of its technology to drugs that can treat Parkinson's disease, hypertension and musculoskeletal conditions.

### Summary

AcruX has ambitions to broaden opportunities within its business but will also keep an eye out for external opportunities. It would, for example, over the long term consider exploring technologies complementary to the company's current passive, non-occlusive technology. The company has developed skills in four key areas: clinical, regulatory, manufacturing and partnering.

The company will be measured by its ability to generate more products from its technology and it will be also measured by its ability to partner these products at appropriate phases of their development. The company's signing of two separate deals with Organon is an indicator of the level of interest the AcruX technology can generate when it is put in front of potential partners in an attractive and commercially relevant way.

AcruX is a high quality stock and warrants inclusion in speculative biotech portfolios as a long term core holding.

**Bioshares recommendation: Speculative Buy Class A**

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### AcruX - Financial History

(at June 30)

	As a private company						As a public company				Cum.	Cum. 02-07
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
Net Operational Cash Flows				-\$2.7	-\$5.8	-\$4.0	-\$5.7	-\$8.3	-\$7.6			-\$34.1
Net Investing Cash Flows				-\$0.3	-\$1.3	-\$0.5	-\$0.6	-\$0.5	-\$0.4			-\$3.6
Gross Financing	\$5.0	\$0.0	\$11.3	\$9.9	\$0.1	\$0.2	\$30.0	\$0.5	\$5.5	\$22.5	\$84.90	\$46.1
Net Financing Cash Flows				\$9.4	\$0.1	\$0.2	\$27.8	\$0.5	\$5.5			\$43.3
Cash End				\$17.8	\$10.8	\$6.6	\$28.1	\$19.7	\$17.2			
R&D (Direct)				-\$3.2	-\$4.4	-\$3.1	-\$4.3	-\$4.8	-\$6.4			-\$26.3
Emp Expense				-\$1.1	-\$2.1	-\$2.5	-\$4.7	-\$4.3	-\$4.7			-\$19.3
<b>R&amp;D+Emp</b>				<b>-\$4.3</b>	<b>-\$6.5</b>	<b>-\$5.6</b>	<b>-\$9.0</b>	<b>-\$9.0</b>	<b>-\$11.1</b>			<b>-\$45.6</b>
Employees				16	25	29	36	43	39			
Shares							130.9	134.625	142.8			
Share Price							\$0.50	\$0.75	\$1.54			
Capitalisation							\$65.5	\$100.3	\$219.2			
								ch. fr '05	\$153.7			
									235%			

Shares	156.05
Current Share Price (10/8/07)	\$1.50
<b>Current Capitalisation</b>	<b>\$234.1</b>
Adjusted Cash (for recent capital raising)	\$39.7
<b>Technology Value</b>	<b>\$194.3</b>

### Revision and corrections

In our short feature in Bioshares 226 that examined companies holding cash assets greater than \$20 million, we failed to include **Novogen** (cash at June 30 estimated at \$55 million), and we also did not include **Heartware**'s capital raising completed in June that gained the company \$37 million and increased its pro forma cash position to approximately \$45 million. Finally, with **Biota**'s announcement this week we are able to include its actual cash position at June 30, 2007 of \$62 million.

The result of these revisions and corrections is that 18 Australian biotech companies involved in drug or device development hold almost \$1 billion in cash assets. The aggregate capitalisation of these 18 companies was \$3.8 billion.

### REVISED AND CORRECTED TABLE FROM BIOSHARES 226

#### Biotechs with Reported/Estimated Cash Resources > \$20 million (June-July 2007)

SORT							
Code	Company	Cash	Source	Share Price*	Capitalisation	Tech. Value	
1	PTD	Peptech***	\$170.0	Est.	\$1.39	\$325	\$155
2	PGL	Progen Pharmaceuticals	\$100.0	Approx.	\$3.64	\$217	\$117
3	AVX	Avexa	\$76.9	Rep.	\$0.59	\$237	\$161
4	PXS	Pharmaxis	\$76.2	Rep.	\$3.38	\$601	\$525
5	BTA	Biota Holdings	\$62.0	Rep.	\$1.74	\$318	\$256
6	CUV	Clinuvel Pharmaceuticals	\$60.4	Rep.	\$0.79	\$239	\$178
7	NRT	Novogen	\$55.0	Est.	\$1.86	\$182	\$127
8	VCR	Ventracor	\$49.0	Ann.	\$0.69	\$214	\$165
9	QRX	QRxPharma	\$46.0	Rep.	\$1.84	\$138	\$92
10	HTW	Heartware	\$45.0	Rep.	\$0.63	\$155	\$110
11	ACR	Acrux**	\$40.0	Rep.	\$1.55	\$242	\$202
12	CIR	Circadian*	\$40.0	Est.	\$1.22	\$49	\$9
13	CXS	ChemGenex	\$25.0	Est.	\$0.90	\$167	\$142
14	ACL	Alchemia**	\$25.0	Rep.	\$0.83	\$133	\$108
15	PEP	Peplin	\$24.1	Rep.	\$0.90	\$166	\$142
16	FER	Fermiscan Holdings	\$23.8	Rep.	\$1.83	\$261	\$238
17	UBI	Universal Biosensors	\$22.2	Rep.	\$1.35	\$173	\$151
18	MBP	Metabolic Pharmaceuticals	\$20.0	Est.	\$0.13	\$38	\$18
<b>Total</b>			<b>\$960.5</b>			<b>\$3,854.3</b>	<b>\$2,893.7</b>

\*includes share of cash in 67% owned Vegenics

\*\* adjusted for recent capital raising

\*\*\* assumes merger with EGX

Tech. Value = Cap'n - Cash

Reported (Rep.) figures are for June 30, 2007

**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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