

In this edition...

What is behind the record flow of almost \$500 million into the Australian biotech sector in the first half of 2007? Part of the reason is that there are now a handful of companies developing products at the high value creation Phase III stage. There are more of these companies waiting in the wings, so expect some large capital raisings to occur again in the near future. One such company is Peplin, which we alert readers to as it is set to release Phase II trial results very soon.

More good news came Optiscan investor's way this week, with the news that Optiscan had signed a deal with the Carl Zeiss Group.

The editors

Companies covered: PEP,OIL

	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)	3.6%
Cumulative Gain	239%
Av Annual Gain (6 yrs)	26.8%

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Bioshares

6 July 2007
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Delivering independent investment research to investors on Australian biotech, pharma and healthcare companies.

Quarterly Review

Record Capital Inflow Dominates June Quarter Activity

The performance of the Australian listed life sciences sector weakened in the June quarter 2007, with the **Bioshares Index** declining by 5.6% from the previous quarter. In contrast, the Nasdaq Biotech Index rose 3.3% over the same period. The **Bioshares Large Cap Index**, which includes CSL, Cochlear, Sigma Pharmaceuticals, Resmed and API, also weakened in the June quarter, registering a 2.3% fall. This came on the back of two strong growth quarters of 14.4% in the December quarter 2006, and 12.5% in the March quarter of 2007.

Capital Raising Trends

The June quarter 2007 saw the greatest sum of funds raised in any single quarter by Australian listed drug developer and device companies, with a total of \$363 million being raised from rights issues, private placements and IPOs. For the half year just ended, almost \$500 million has been raised. The reason for this record level of capital raising is the increase in the number of advanced-stage clinical development programs under management that require substantial funding. To this end, companies such **Avexa**, **Clinuvel Pharmaceuticals** and **Progen Pharmaceuticals**, were successful in raising, in aggregate, more than \$160 million to support Phase III clinical trials. Two listed heart assist device companies, **Ventracor** and **Heartware**, raised an aggregate of almost \$60 million.

A handful of Australian listed life science have now demonstrated that appropriate funds can be accessed for late stage clinical trials. This scale of funding would have been considered impossible to achieve prior to 2005, when Pharmaxis paved the way with an \$87 million international and domestic capital raising.

While appropriate and adequate funding doesn't guarantee clinical or commercial success, the recognition that the probability of clinical and commercial success increases if projects are properly funded has obviously become more widespread. A second factor behind the flow of funds into the sector is that a number of international investors perceive that considerable value lies untapped amongst a bevy of Australian listed biotech companies.

Cont'd on page 3

Index performances by Quarter

	Q2 2006	Q3 2006	Q4 2006	Q1 2007	Q2 2007
Bioshares Index	-18.3%	5.2%	20.6%	6.3%	-5.6%
Nasdaq Biotech Index	-11.7%	1.5%	5.9%	-2.7%	3.3%
Bioshares Large Cap Index	-1.3%	2.1%	14.4%	12.5%	-2.3%
ASX 300 Index	-1.1%	1.6%	10.4%	5.6%	4.8%

Capital Raisings by Australian-listed Biotech Companies Q2 2007

Company	Investment manager/Investor	Type of raising	Funds raised (\$M)
Progen Pharmaceuticals	Bell Potter Securities/eG Capital	Rights Issue and Placement	\$73.80
Avexa	ABN Amro Morgans	Rights Issue	\$64.30
Heartware		Placement	\$30.00
Ventracor		Placement and SPP	\$28.40
Clinuvel Pharmaceuticals		Private placement and SPP	\$26.40
pSivida		Private placement	\$11.00
Bionomics	Intersuisse Corporate/LINWAR Securities	Placement	\$10.00
ITL		Placement	\$8.32
Eiffel Technologies		Rights Issue	\$5.98
Ellex Medical Lasers	Taylor Collison	Private placement	\$5.50
Labtech Systems	Paradigm Capital	Private placement	\$4.00
Apollo Life Sciences	Blackwood Capital	SPP	\$3.60
Unilife Medical Solutions	Bell Potter Securities	Private placement	\$3.50
Solbec Pharmaceuticals	Kirke Securities	Placement and Rights Issue	\$2.45
Virax Holdings		Rights Issue	\$2.00
Optiscan		SPP	\$1.70
Colltech	BBY	Placement	\$1.48
KarmelSonix	Patersons Securities	Rights Issue	\$1.10
HealthLinx		Placement	\$0.89
Medical Therapies		Private placement	\$0.82
Probiomics		Private placement	\$0.40
BioMD		SPP	\$0.38

Total raised in Q2 2007 \$286.0

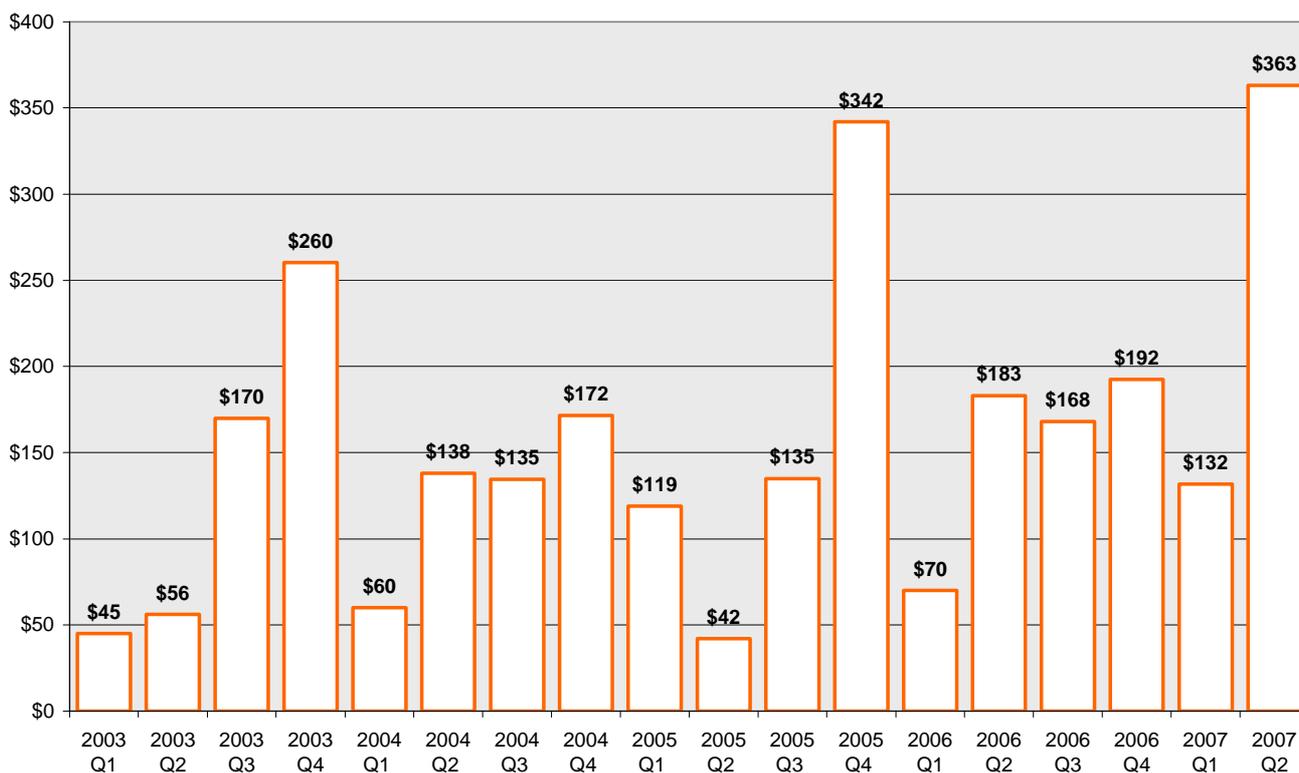
IPOs **\$77.0**

Total raised in Q2 2007 - capital raisings and IPOs \$363.0

Total raised in Q1 2007 \$131.8

Total raised in 2007 **\$494.8**

Quarterly Capital Raisings (\$M) - Australian-listed Biotech Companies, 2003 - 2007



IPOs

Following a lacklustre March quarter for IPOs, where a solitary life sciences company, **CycloPharm**, listed on the ASX, activity improved considerably in the June quarter, 2007. Four companies listed, including **Stem Cell Sciences**, a genuinely international stem cell research products company with strong Australian links, **QRxPharma**, a pain therapy company and **Halcygen**, and anti-fungal treatment company. A fourth company, **NuSep**, a protein separations technology operation was demerged from **Life Therapeutics**, in what appears to be in effect a recreation the of original **Gradipore** business.

IPOs in Q2 2007

Company	Code	Funds Raised (M)	Issue price	Price 30/06/07	Gain/loss
Halcygen Pharm.	HGN	\$12.50	\$0.50	\$0.60	20%
NuSep*	NSP	\$2.50	\$0.50	\$0.40	-20%
QRxPharma	QRX	\$50.00	\$2.00	\$1.69	-16%
Stem Cell Sciences	STC	\$12.00	\$1.07	\$0.99	-8%

*NuSep demerged from Life Therap.; funds were raised via rights issue

Outperformers

There were some reasonable outcomes in the biotech sector over financial year just passed. Nineteen companies, or one sixth of the 130 life science companies listed on the ASX, generated gains over the year in excess of 100%. **Polartech** has increased by over 800% in the year with the commercialisation of its cervical cancer detection system progressing. Its rise has been off a low base with the share price now back to 2004 levels and the company capitalised at \$70 million at June 30.

Solagran, which is developing what it terms 'bioeffective' compounds from Russia, also had a stellar run over the last year, with its share price increasing over 600% and it was capitalised at \$198 million at June 30.

New listings performed well over the year with **Universal Biosensors** finishing the year 109% above its listing price and **Avastra**, which relisted with new assets commercialising sleep diagnostic centers in the US, finishing up 268% for the year. **Cordlife** also had a strong run increasing by 217% for the year. In the Tier-1 biotech group, **Avexa** and **Chemgenex Pharmaceuticals** had very strong years, surging 176% and 167% respectively. And **Clinuvel Pharmaceuticals** was up 149% for the year, with all three companies making solid progress with late stage clinical trials.

Imugene was up 123% for the year following good progress with its animal vaccine programs. **Bionomics** more than doubled in the year (+111%) with its vascular disrupting agent due to enter the clinic this year. And **Acrux** has been making very solid progress with its first product (a transdermal HRT to be marketed by **KV Pharmaceutical**) expected to receive FDA approval this year.

Underperformers

At the other end of the spectrum, there were 21 companies that experienced falls in excess of 50% in their share price over the financial year. Receivers have been appointed at **Chemeq** and the stock fell 75% before the trading halt. The lesson to be learned from Chemeq is that if companies hold grand commercial aspirations, then a suitably strong management team is required, a quality that Chemeq lacked. **pSiVida** fell 68% over the year with its mix of company assets following its merger as well as recourse to debt funding instruments polarizing investors and restricting growth prospects. While the company has some good assets, including the Medidur product, which is in a 1000 patient Phase III trial in diabetic macular oedema, the company needs to perform better on the communications and management front.

Metabolic Pharmaceuticals was down 67% for the year following its failed Phase II obesity trial. **Clinical Cell Culture** fell by 65% after it missed commercialisation targets. **Prima Biomed** was down 61% as it seeks to funding for its worthy ovarian cancer vaccine project. And **Genetic Technologies** fell by 59% following the launch of an ASIC investigation into share trading by management.

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Clinical Trial Developments - June Quarter 2007

Company	Code	Product/Therapeutic	Event
Alchemia	ACL	HyCAMP	Announced results of Phase II trial
Acrux	ACR	Testosterone MD-Lotion	Completed enrolment in Phase II trial, 40 pts
Benitec	BLT	Vector coding three anti-HIV RNA	Commenced pilot study in HIV- 1 pts in Los Angeles
BioMD	BOD	Cardiovascular patches to repair defective internal heart tissue	Ethics approval received for 50pt Phase II trial of ADAPT Advanced Tissue Process technology
Biota	BTA	CS8958 - long acting neuraminidase inhibitor (anti-influenza)	Completed Phase I studies in Japan and received ethics approval for UK Phase I study
Biotron	BIT	BIT225	Was expected to complete Phase I
Bone Medical	BNE	Capsitonin	Commenced Phase II for osteoporosis (with Q-Pharm, Brisbane)
ChemGenex	CXS	Ceflatonin	Commenced Phase II/III trial in 50-75 CML (cancer) pts who have failed TK therapy
Clinuvel Pharmaceuticals	CUV	CUV1647	Commenced Phase III trial in 50-75 pts, for erythropoietic protoporphyria
Clinuvel Pharmaceuticals	CUV	CUV1647	Commenced Phase III trial in 150pts, for polymorphic light eruption
Cytopia	CYT	CYT997 (IV- cancer)	Was expected to complete Phase I; announced dose limiting toxicity reached in 1 pt
Dia-B Technologies	DIA	ISF402	Commenced Phase Ib for diabetes
Narhex Life Sciences	NLS	DG17 (anti-HIV)	Ethics approval received for 20-24pt Phase IIa trial with S.E. Sydney Area Health Service
Neuren Pharmaceuticals	NEU	Glypromate	Commenced Phase III trial in 600 pts for cognitive impairment post CABG surgery
NuSep	NSP	Spermsorter [IVF technology]	Commenced 20-30pt trial at Westmead Hospital
Peptech	PTD	PN0621 (arthritis, inflammation)	Commenced Phase I safety study, 30 pts (St Vincents Hospital, Sydney)
Progen Pharmaceuticals	PGL	PI-88	Announced final results of Phase II trial in post-resection liver cancer
Pharmaxis	PXS	Bronchitol	Commenced Phase III trial for Cystic Fibrosis
Phosphagenics	POH	TPM-02/Insulin	Commenced Phase I for diabetes (with CMAX, Adelaide)
Viralytics	VLA	Cavatak	Commenced Phase I for melanoma, 9 pts (PA Hospital, Brisbane)

Bioshares Model Portfolio (6 July 2007)

Company	Price (current)	Price added to portfolio
Acrux	\$1.74	\$0.83
Alchemia	\$0.96	\$0.67
Biodiem	\$0.26	\$0.29
Biota Holdings	\$1.83	\$1.55
Circadian Technologies	\$1.28	\$1.45
Cytopia	\$0.61	\$0.46
Chemgenex Pharma.	\$1.10	\$0.38
Optiscan Imaging	\$0.56	\$0.35
Neuren Pharmaceuticals	\$0.38	\$0.70
Peplin	\$0.99	\$0.83
Peptech	\$1.40	\$1.31
Phylogica	\$0.32	\$0.42
Probiotec	\$1.18	\$1.12
Starpharma Holdings	\$0.37	\$0.37
Sunshine Heart	\$0.19	\$0.19
Tissue Therapies	\$0.52	\$0.58
Universal Biosensors	\$1.40	\$1.23

Portfolio Changes – 6 July 2007

IN:
No changes

OUT:
No changes



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Thredbo Biotech Summit

The Essential Biotech Investment Event



The third annual **Bioshares Thredbo Biotech Summit** is less than two weeks away. We are pleased to announce that **Wilson HTM**, an investment and advisory group prominent in the Australian life sciences sector has elected to become a sponsor of the event and are sponsoring the Friday evening Cocktail Reception.

The Summit will be an ideal venue for the country's leading biotech managers and investors to come together to discuss current issues and themes affecting the local and international biotech sector. We hope you can join us!

We have a limited number of accommodation and registration packages remaining. Please contact us at info@bioshares.com.au. Registration will be closing soon.

Optiscan Imaging Signs Deal with Carl Zeiss Group

Optiscan Imaging (OIL: 56 cents) has secured a very significant collaboration for a new application of its confocal microscope technology. It has teamed up with **Carl Zeiss Group**, one of Germany's major hi-tech manufacturing companies and a leading ophthalmology equipment group. The collaboration brings a number of benefits to Optiscan.

Under the terms of the deal, Optiscan will receive up to \$4 million in milestone-based payments for developing a rigid endomicroscope for its collaborator (the collaboration with **Pentax** is for a flexible endomicroscope used by gastroenterologists). A further \$16 million in sales are expected to be generated through the collaboration in what Optiscan's CEO, Matthew Barnett, describes as "very genuinely anticipated product sales".

Optiscan has successfully conducted proof of concept trials in patients with its rigid device in patients undergoing pancreatic cancer resection and in liver disease diagnosis. The device allows surgeons to see in real-time tissue at a cellular level which can guide removal of tumours potentially more accurately.

Optiscan and the Zeiss Group have not disclosed the commercial applications being explored under their agreement for competitive reasons. However, Optiscan has stated that it is free to explore other uses for its rigid endomicroscope including general surgery, urology, gynecology, orthopedics and dermatology.

Clinical trials with the Zeiss Group will begin in the next few months and the first product could be on the market within two years. Most of the product development has been completed although there will be some software enhancement development work. The trials will be conducted in the US and Germany.

Another important outcome of this deal is that Optiscan's profile should be lifted considerably and the chances of securing another rigid deal are high in our view.

For Pentax, Optiscan only manufactures the insert – the confocal microscope – for the device that Pentax is selling. With the rigid system, Optiscan will manufacture most of the system delivered to the Zeiss Group.

The deal is important also because it fills a gap in Optiscan's product pipeline and brings in additional funding for its technology development. Optiscan will now have a more consistent revenue stream moving ahead with R&D funding from its two partners (Pentax and Carl Zeiss), royalties from benchtop microscope sales that incorporate its technology, sales orders from Pentax, sales from its research grade product called the Optiscan FIVE 1, and potentially in two years, sales of rigid devices.

Optiscan's patents over its confocal technology expire in 2009 and its patents over the miniaturisation of the scanning head of the microscope go out to 2018. It should be at least five years ahead of any competitors who may follow Optiscan and its confocal technology.

Summary

The deal with Carl Zeiss is perhaps one of the final important stepping stones for Optiscan to building a profitable and successful microscopy and instrumentation business. Optiscan is capitalised at \$60 million with an estimated \$6 million in cash.

Bioshares recommendation: **Speculative Buy Class A**

Bioshares

Peplin – Approaching Major Milestone

One of the very appealing stocks in the sector at the moment is Peplin (PEP: \$0.99). The company is developing a topical skin cancer and sun spot treatment product, PEP005, which is currently completing a Phase IIb trial in removing actinic keratosis (AK) lesions. Results from this 200 person study are expected this month and if successful, the company will move to a Phase III trial at the end of this year and we expect in combination with a significant capital raising that will allow Peplin to bring its product to market.

There are several factors that make Peplin an appealing investment proposition. The company is approaching the most advanced stage of trials for PEP005 and it is well financed, with \$33 million in cash at the end of March this year. We believe the company has good access to further (large) funds as required, having secured a major US biotech investment group, **MPM Capital**, as a substantial shareholder. Its drug candidate has a low technology risk, having delivered consistently good results. The company owns 100% of the technology and on a comparative valuation with other Australian biotechs at similar stages of development, it is offering very good value (see table below). The company's management is strong and the company is additionally appealing because it intends to sell its product directly into the US dermatology market.

Current trial

The current Phase IIb AK trial involves 200 patients who have multiple AK lesions. The previous trials have looked at treating a single lesion but this trial has looked at what's termed field therapy, where an area of skin containing between 4-8 lesions is treated.

A competing product in the market, Aldara, has about a 40% effectiveness in achieving complete clearance and Peplin is hoping to deliver a result that is competitive with this product. The point of difference to be noted is that Peplin's product is applied for two to three days, compared to up to 16 weeks treatment with Aldara.

Path to market

If this current trial is successful, the first of two or three Phase III trials should begin at the end of this year or early next year in up to 750 people. Reproducible data of efficacy will be required in these

trials. Both trials could be completed by the end of 2008 which would potentially see the drug on the market in 2010.

In the US, Peplin's current business model is to sell the drug with its own sales force of around 50 people and then look to establish marketing partners in other regions.

Other indications

Peplin is also conducting trials in people with non-melanoma skin cancers (basal cell carcinoma). Results from a Phase IIb trial in BCC are due in the second half of this year. The priority for the company is to gain approval of PEP005 for the treatment of AK as the endpoint is clinical clearance. With treating skin cancers such as BCC, two year follow up data is required after treatment to show that the lesions do not return. The market for AK, which is expected to be in the order of \$US300 million in 2010 for existing products which represent about 20% market penetration, is five times larger than for BCC (US\$60 million). The focus on AK is understandable although BCC trials will also continue and remain important.

Risks

It should be noted that while we believe the technology risk is low, the risk that the product will not achieve desired efficacy levels exists and this drug candidate forms the core of the company's technology assets although it has potentially a variety of applications.

Summary

Peplin has a low technology risk and its product should be able to displace existing pharmaceutical products on the market. The company is on track to bring its drug candidate to market in 2010 and its intention to keep US marketing rights to itself increases the appeal with this company. The Phase IIb AK results due this month, if positive, will be a trigger to take this company to a new level that should position Peplin for the final path to commercialisation of its technology for its first application.

Bioshares recommendation: **Speculative Buy Class A**

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Australia's Leading Drug Developers

Company	Product	Diseases/Indications	Stage of development	Estimated annual sales (\$M)	Royalty obligations	Estimated Cash (\$M)	Cap. (\$M)	Tech. Value (\$M)
Pharmaxis	Bronchitol	Cystic fibrosis, bronchiectasis	Phase III trial for bronchiectasis completed. Phase III trial for CF underway	US\$200+	Sliding scale 2%-3%	\$80	\$570	\$490
Clinuvel Pharmaceuticals	CUV1647	UV light disorders	Phase III trials in PLE & EPP started	US\$200	-	\$63	\$260	\$198
Avexa	Apricitabine	HIV	Phase III trial to begin 2H 2007	US\$300	Est. 10% - 12% to Shire	\$80	\$284	\$204
Chemgenex Pharmaceuticals	Ceflatonin	Gleevec-resistant CML	Phase II/III trial underway	US\$150 - US\$250	51% profit share with Stragen for EU sales	\$25	\$210	\$185
Progen Industries	PI-88	Cancer	Liver cancer Phase III trial to begin 2H 2007	US\$1000 +	8.5% to ANU	\$100	\$260	\$160
Peplin	PEP005	AK, BCC, SCC	Phase III trial for AK expected to begin late 2007	US\$200 - US\$250	-	\$33	\$185	\$152

The Australian Listed Life Sciences Sector

June 30, 2007: Capitalisation \$34.1 billion, 130 Companies

Bioshares Large Cap. Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
CSL	CSL	16,108	Manufactures pharmaceutical products including vaccines and human plasma fractions.	7%	\$88.00
Resmed Inc.	RMD	3,740	Manufactures diagnostic and treatment equipment for sleeping disordered breathing.	-23%	\$4.83
Cochlear	COH	3,350	Manufactures cochlear hearing implants.	-6%	\$61.00
Sigma Pharmaceuticals	SIP	2,028	Pharmaceutical manufacturing and wholesaling.	-16%	\$2.12
API	API	579	Pharmaceutical wholesaler.	7%	\$2.25

Capitalisation Total 25,805

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
Pharmaxis	PXS	587	Marketing a lung function test, Aridol, and developing a treatment, Bronchitol, for bronchiectasis and COPD.	2%	\$3.30
Biota	BTA	340	Commercialised Relenza anti-flu drug and flu diagnostic kits. Now developing an improved version.	19%	\$1.86
Blackmores	BKL	330	Manufactures vitamin, mineral and herbal supplements and skin & hair products in Australia and N.Z.	-7%	\$20.56
Cellestis	CST	313	Marketing a diagnostic for latent tuberculosis.	-12%	\$3.26
Fermiscan Holdings	FER	299	Commercialising the use of x-ray diffraction to aid in the screening of breast cancer.	-2%	\$2.09
Clinuvel Pharmaceuticals	CUV	278	Developing an analogue of the alpha-MSH protein as a photo-protective agent	-25%	\$0.92
Progen Pharmaceuticals	PGL	274	Developing oncology therapeutics, including an anti-angiogenesis compound.	-37%	\$4.60
Avexa	AVX	258	Developing antiviral therapies for HIV and Hepatitis B and a novel antibiotic.	-13%	\$0.64
Ventracor	VCR	244	Developer of the VentrAssist device, an artificial heart assist device (LVAD).	-16%	\$0.79
Peptech	PTD	236	Develops treatments for animal health care products using peptides. Holds patent relating to anti-inflammatory compound.	-23%	\$1.44
AcruX	ACR	219	A Pooled Dev. Fund commercialising a drug delivery technology that uses sunscreen penetration enhancers to aid transdermal drug delivery.	14%	\$1.54
Mesoblast	MSB	217	Developing therapies based adult stem cells called mesenchymal stem cells, with applications in cartilage regrowth and bone repair.	-6%	\$2.02
ChemGenex Pharmaceuticals	CXS	208	Genomics/theranostics company with projects in obesity, diabetes, oncology and hypertension.	42%	\$1.12
Solagran	SLA	198	Developing complementary medicinal compounds called Bioeffectives.	68%	\$1.23
Novogen	NRT	193	Developing analogues of naturally occurring phenolic hormones to treat cancers and other conditions.	-19%	\$1.98
Sirtex Medical	SRX	192	The company's core technology uses radioactive particles to irradiate tumours in the liver. Approved for use in most major regions.	1%	\$3.44
Universal Biosensors	UBI	186	Development, manufacture and commercialisation of a range of in vitro diagnostic tests for point-of-care use.	22%	\$1.45

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
Phosphagenics	POH	175	Commercialising a drug delivery technology improving the delivery of vitamin E and existing pharmaceutical products through phosphorylation.	4%	\$0.29
Peplin	PEP	158	Developing a plant derived compound, PEP005, to treat non-melanocytic skin cancers and other systemic cancers such as leukemia.	10%	\$0.86
QRxPharma*	QRX	127	Developing a 'dual opioid' drug to treat moderate to severe pain.	-16%	\$1.69
Evogenix	EGX	124	Commercialising a next generation antibody optimisation and humanisation technology.	2%	\$0.89
Alchemia	ACL	121	Commercialising new solid phase carbohydrate synthesis technology. First product, a synthetic heparin, to be launched by partners in 2008.	-12%	\$0.86
Heartware	HTW	114	Developing a mechanical heart pump (LVAD).	-16%	\$0.61
pSiVida	PSD	94	Developing and marketing drug delivery technologies, with a special focus ophthalmic applications.	-39%	\$0.17
Agenix	AGX	92	Manufacture and sale of diagnostics and animal health products. Developing Thromboview, a blood clot diagnostic imaging agent	157%	\$0.27
Institute of Drug Technology	IDT	91	Manufacturer of pharmaceutical ingredients to international standards for major pharmaceutical groups.	9%	\$2.12
Bionomics	BNO	82	Developing drugs to treat cancer and CNS diseases, and has also developed a gene diagnostic for epilepsy.	37%	\$0.37
Lipa Pharmaceuticals	LIP	77	A contract manufacturer of complementary healthcare products.	9%	\$0.81
Life Therapeutics	LFE	77	R&D of industrial and research grade protein, DNA and viral separation equipment. Acquired Serologicals plasma therapeutics business in 2004.	-43%	\$0.72
CathRx	CXD	73	Developing novel modular cardiac catheters for the diagnosis and treatment of abnormal heart rhythms	9%	\$2.40
GenePharm Australasia	GAA	72	An generic pharmaceutical manufacturer and distributor.	-21%	\$0.52
Polartech	PLT	70	Develops and commercialises medical instruments to diagnose pre-cancer and cancer, in particular cervical cancer and melanomas.	63%	\$0.58
Avastra	AVS	69	Consolidating sleep disorder testing centres in the USA	8%	\$0.70
Starpharma Holdings	SPL	63	Developer of pharmaceutical applications of chemical scaffolds known as 'dendrimers'.	-15%	\$0.38
Cordlife	CBB	57	Rolling out tissue banking services in Australia and Asia	103%	\$0.73
Southern Dental Industries	SDI	56	Manufacture & distribution of amalgam (fillings) & other dental materials and product R&D.	-47%	\$0.48
Probiotec	PBP	56	Manufacturer, marketer and distributor of a range of over the counter (OTC) pharmaceuticals, complementary medicines and speciality ingredients	13%	\$1.20
Ellex Medical Lasers	ELX	55	Develops, manufactures and markets solid state ophthalmic lasers used to treat secondary cataracts and retinal disorders.	-1%	\$0.85
Proteome Systems	PXL	55	Developing proteomics hardware and software for drug development and diagnostic applications.	40%	\$0.35
Prana Biotechnology	PBT	53	Developing drugs to treat CNS diseases such as Alzheimer's and Parkinson's.	0%	\$0.35
Genetic Technologies	GTG	53	Provides DNA paternity testing services and holds broad patents relating to the use of non-coding DNA.	-3%	\$0.15

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
Scigen	SIE	51	Developer and manufacturer of biopharmaceuticals. Company is based in Singapore and was spun out of Sonic Healthcare in 2002.	-2%	\$0.09
Neuren Pharmaceuticals	NEU	51	Developing therapeutics in area of neuroprotection and metabolic disorders.	-22%	\$0.39
Apollo Life Sciences	AOP	51	Developing portfolio of protein drugs to treat various disorders and diseases	-32%	\$0.27
Unilife Medical Solutions	UNI	50	Developer of retractable syringes.	-4%	\$0.28
Cyclopharm	CYC	50	A nuclear medicine company that markets the Technegas lung imaging system	6%	\$0.36
Portland Orthopaedics	PLD	50	Developer, manufacturer and marketer of surgical hip and knee implants	-9%	\$0.32
Optiscan Imaging	OIL	49	Manufacture of confocal microscopes for clinical diagnosis including endoscopes through alliance with Pentax.	0%	\$0.47
Cytopia	CYT	48	Small molecule drug development company. Has PDF status until June 2007.	-7%	\$0.65
ITL	ITD	46	Develops and distributes medical devices such as safety equipment to prevent needle stick injuries and sterile preparation kits.	-32%	\$0.38
Halcygen*	HGN	46	Developing an anti-fungal drug	20%	\$0.60
Phylogica	PYC	43	Developing phylomer (protein fragment shapes) compound libraries for use in human therapeutics.	-8%	\$0.35
Metabolic Pharmaceuticals	MBP	39	Developing therapies for pain and metabolic diseases.	-10%	\$0.13
Medical Developments	MVP	33	Commercialising the Penthrax inhaler for temporary pain relief. Used widely in ambulances across Australia.	-3%	\$0.58
Stem Cell Sciences	STC	33	Contract research and development and sale of re-agents for use in stem cell therapy research	-8%	\$0.99
Brain Resource Corp	BRC	32	Development and commercialisation of functional brain analysis techniques.	6%	\$0.35
Imugene	IMU	32	Developing animal products such as antibiotic alternatives used in the stock feed industry using a vaccine and gene therapy approach.	-4%	\$0.25
Sunshine Heart	SHC	30	Developing the C-Pulse heart assist device. The C-Pulse wraps around and compresses the aorta, increasing blood flow through the body.	-6%	\$0.17
Avantogen	ACU	28	A developer of various cancer therapeutics. Currently suspended from trading.	0%	\$0.05
Medic Vision	MVH	27	Marketing training software and hardware for surgeons (formerly Premier Bionics)	66%	\$0.29
Benitec	BLT	27	R&D company focusing on gene silencing, specifically DNA delivered RNAi, technology.	-21%	\$0.12
Labtech Systems	LBT	24	Developing the MicroStreak technology for the automation of microbiology laboratory processing	-6%	\$0.25
Giaconda	GIA	24	Developed novel (patented) combinations of registered drugs for the treatment of gastrointestinal disorders.	-33%	\$0.33
Bone Medical	BNE	23	Developing treatments for bone and joint degenerative diseases such as arthritis and osteoporosis.	-33%	\$0.30
KarmelSonix	KSX	23	Respiratory and pulmonary devices company. Acquired technologies from PulmoSonix and Karmel Medical Acoustics Technologies.	340%	\$0.11
Eastland Medical Systems	EMS	23	Developing retractable syringes and other surgical products.	27%	\$0.14

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
Biotron	BIT	22	Developing anti-viral therapies and cancer screening technologies.	-14%	\$0.25
Occupational & Medical Innovations	OMI	22	Developing safety devices used in the healthcare industry, including safety syringes.	13%	\$0.59
Compumedics	CMP	21	Develops, manufactures and markets sleep diagnostic, treatment and monitoring equipment.	3%	\$0.15
Rockeby Biomed	RBV	20	Research, development and marketing of rapid testing technologies for infectious diseases in animals and humans.	18%	\$0.03
Viralytics	VLA	20	Developing a cancer treatment based on the application of viruses (oncolytic virus technology).	-18%	\$0.08
Antisense Therapeutics	ANP	20	Developing antisense compounds to treat multiple sclerosis and acromegaly.	-12%	\$0.04
Living Cell Technologies	LCT	19	Developing cell therapies for diabetes, haemophilia and Huntington's disease.	-22%	\$0.13
Biopharmica	BPH	19	Managing cancer treatment and detection and bacterial DNA diagnostic projects. Portfolio investment approach.	91%	\$0.22
IM Medical	IMI	18	Markets the Intelliheart Cardiovascular Diagnostic System	27%	\$0.02
PanBio	PBO	18	Develops and markets vector born infectious diseases diagnostic eg Dengue fever.	-19%	\$0.29
Clovercorp	CLV	17	Development and production of omega-3 food additives from tuna oil.	-5%	\$0.11
Advanced Ocular Systems	AOS	16	Under restructure. Currently suspended from trading.	0%	\$0.08
Clinical Cell Culture	CCE	16	Development of skin treatment products for use in burns and other skin damage. Lead product is Cellspray.	-32%	\$0.04
Anadis	ANX	16	Specialises in R&D of bovine colostrum products for therapeutic use in animals and humans.	-27%	\$0.16
Brainz	BZI	16	Develops non-invasive brain monitors for the detection of brain injury designed for use at the patient's bedside. A NZ company.	-37%	\$0.26
Norwood Abbey	NAL	15	Developing needle-free and micro needle drug delivery technologies	-23%	\$0.07
BioProspect	BPO	15	Developing insecticides from naturally occurring molecules	44%	\$0.05
Tissue Therapies	TIS	15	Commercialising growth factors for spray-on skin product, other wound healing and in research and industrial cell growth applications.	0%	\$0.55
Dia-B Tech	DIA	14	Developing therapeutics and diagnostics in the area of diabetes.	-23%	\$0.10
USCOM	UCM	14	Marketing a non-invasive heart output function monitor.	-32%	\$0.36
Biodiem	BDM	14	Developing a peptide drug for an eye disease	-26%	\$0.26
Atcor Medical	ACG	13	Markets the SphygmoCor device, a noninvasive technology that provides information regarding the functioning of the cardiovascular system	-28%	\$0.13
Visiomed Group	VSG	13	Marketing asthma spacer devices.	100%	\$0.02
Virax Holdings	VHL	12	Bio-pharmaceutical R&D company developing a therapeutic and prophylactic vaccine for HIV.	-27%	\$0.11
BioMD	BOD	12	Acquired an interest in a tissue engineering technology company, Celxcel.	17%	\$0.14
Solbec Pharmaceuticals	SBP	11	Developing plant-based compounds for the treatment of melanomas and asbestos related lung cancers.	-12%	\$0.04

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
Eiffel Technologies	EIF	11	Undertaking a strategic review of investment opportunities	-18%	\$0.02
NeuroDiscovery	NDL	11	Provides electrophysiology services to biotech and pharma, and is developing range of compounds for treating neuropathic pain.	-14%	\$0.18
Biosignal	BOS	10	Developing compounds that interrupt the colonisation of bacteria. Applications in contact lenses and anti-fouling for marine paints.	-23%	\$0.10
Colltech	CAU	10	Has developed a novel technology for the extraction of collagen from sheepskins.	-16%	\$0.06
Medec	MAA	10	Healthcare services and equipment, including treatment tables, and complementary medicines	-33%	\$0.12
Medical Monitors	MDM	10	Develops and manufactures cardiac monitoring and diagnostic devices.	-19%	\$0.11
Somnomed	SOM	9	Commercialising an oral device for the treatment of sleep apnea and snoring.	-28%	\$0.02
Medical Therapies	MTY	9	Developing therapies to treat inflammatory diseases, using copper- and zinc- indomethacin	-32%	\$0.13
Chemeq	CMQ	8	Currently suspended from trading. Under administration.	11%	\$0.08
Medigard	MGZ	8	Developed retractable syringe technology and other safety medical products.	32%	\$0.13
Cogstate	CGS	8	Marketing cognitive performance diagnostic products.	3%	\$0.19
Healthlinx	HTX	8	Detecting novel functions of known and new protein and peptides for therapeutic purposes.	17%	\$0.02
Eqitx	EQX	8	Developing therapeutic drugs for chronic diseases and disorders affecting the aged patients.	0%	\$0.15
PharmAust	PAA	8	Has three subsidiaries - Epichem, PharmAust Manufacturing and Mimotopes - which provide products and services to biotech and pharma companies. Developing a drug discovery program.	-40%	\$0.07
Narhex Life Sciences	NLS	7	Developed a low cost protease inhibitor for treatment of HIV in Chinese market.	-26%	\$0.05
Select Vaccines	SLT	7	Development and commercialisation of infectious diseases diagnostics, vaccines and therapeutics specialising in area of hepatitis diseases	4%	\$0.03
Probiomics	PCC	7	A probiotics company that has launched a range of products to aid management of irritable bowel syndrome, diarrhoea and intestinal health.	-18%	\$0.04
Ambri	ABI	7	Developing rapid diagnostic tests bases on mimicking natural biological sensing processes	-20%	\$0.03
Stirling Products	STI	7	Commercialising a production animal growth promotant and meat finisher.	-20%	\$0.07
Genesis Research & Development Corp.	GEN	6	Developing RNAi based therapeutics. Interests in agricultural biotechnologies.	-18%	\$0.21
Biolayer	BLS	6	Developer of a biological coatings technology that can applied to immunoassays, bio-separations, drug delivery and other medical devices.	-28%	\$0.08
Resonance Health	RHT	6	Marketing the FerriScan technology, a non-invasive tool for measuring liver iron levels	-24%	\$0.02
Cryosite	CTE	6	Building a business in the provision of services for storing umbilical cord blood through cryopreservation and ultracold technologies.	-3%	\$0.16
Prima Biomed	PRR	5	Developing the CVac immunotherapy	-45%	\$0.03
Inctive	ICV	4	Development of compounds to treat cancers and auto-immune diseases.	31%	\$0.11

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
NuSep*	NSP	4	Manufacture and sale of protein separations technologies	-20%	\$0.40
RiTract	RTL	4	Developing a safety needle and needle sleeve.	-53%	\$0.04
Analytica	ALT	3	A medical devices company that has developed retractable syringe.	-36%	\$0.02
Acuron	AVP	2	Business is under review. Currently suspended from trading.	10%	\$0.01

Capitalisation Total 8,202

* change in share price is from close of first day of listing

Listed Biotech Investment Funds

Company	Code	Cap. \$m	Principal Activities	Change - Qtr	Price 36/06/07
Circadian	CIR	52	Management and funding of R&D projects with Australian and NZ universities. Holds investments in Optiscan, Metabolic Pharmaceuticals, Antisense Therapeutics, Avexa and Vegenics.	-8%	\$1.29
Biotech Capital	BTC	30	A Pooled Development Fund investing in unlisted Australian biotech companies or in public biotechs, including Starpharma, Clinical Cell Culture, Phylogica and Stem Cell Sciences.	-13%	\$0.35
Xceed Biotech	XBL	17	Holds a 60% stake in Polynovo, which is developing biodegradable polyurethane-based polymers. Also operates Boron Molecular, a chemistry services company.	0%	\$0.17
Genesis Biomedical	GBL	5	Venture capital company with an investment in a fertility diagnostic	0%	\$0.03

Capitalisation Total 99

**Capitalisation Total -
All Indexs** 34,106

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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