

In this edition...

A stunning bid by Merck for Sirna Therapeutics, at a 100% premium, may galvanise interest in the biotech sector. This proposed acquisition for a platform company proves there is value to be had in biotech. We pose the question: what could be up for grabs in Australia?

Incitive is one of only two biotechs to list on the ASX this year. We explain the Incitive business model and its focus on autoimmune diseases.

On the cash reporting front, we report on 88 companies that submit quarterly cash reports. Once again this may serve as a useful tool for the studious biotech investor.

The editors**Companies covered: ICV**

	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)	-6.0%
Cumulative Gain	161%
Average Annual Gain	22.9%

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
Ph: (03) 9326 5382
Email: blake@bioshares.com.au

Mark Pachacz
Ph: (03) 9671 3222
Email: pachacz@bioshares.com.au

Individual Subscriptions (48 issues/year)
\$320 (Inc.GST)
Edition Number 191 (3 November 2006)
ISSN 1443-850X

Copyright 2006 Blake Industry and Market Analysis Pty Ltd. ALL RIGHTS RESERVED.
Secondary electronic transmission, photocopying, reproduction or quotation is strictly prohibited without written consent of the publisher.

Bioshares

3 November 2006
Edition 191

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

Acquisition of Sirna for US\$1.1 billion May Signal Turning Point in Biotech Cycle

A major development in international biotech took place this week when **Merck** announced its intention to pay US\$1.1 billion, in cash, for an emerging biotech company **Sirna Therapeutics**. This is the third major platform technology acquisition announced by Merck this year and is an example of the value that can be generated in this industry.

Sirna is focused on the area of RNAi drug development, which is a novel drug discovery platform that has been slow to develop widespread industry acceptance. The Merck deal is likely to change that. Merck paid a 100% premium for Sirna, which has its most advanced compound moving into Phase II trials for the treatment of wet age-related macular degeneration. It follows on from another acquisition made by Merck in the field of RNAi when it acquired **Rosetta Inpharmatics** in 2001 for US\$620 million.

In a serious effort to strengthen its drug discovery and development capabilities, Merck has been aggressively acquiring platform technologies in rapidly advancing technology areas such as RNAi and monoclonal antibodies. In May this year, Merck acquired **GlycoFi** for US\$400 million to secure that company's yeast glyco-engineering technology and its biological drug optimisation technologies. In the same month, Merck also acquired **Abmaxis** for US\$80 million. Abmaxis was a discovery and monoclonal antibody optimisation technology business.

Another company that has been busy acquiring emerging platform drug discovery/development technologies is **Amgen**. In December last year it announced it would acquire monoclonal antibody group **Abgenix** for US\$2.2 billion. This was followed by a US\$290 million acquisition of **Avidia** in September this year. Avidia's core technology is in its Avimer proteins, which consist of single protein chains with individual binding sites on that chain, similar to beads on a string, where each bead is designed to bind to a particular target site. An attractive feature of this technology is that it is not encumbered by royalty rights, an issue with antibody drug development.

Another major technology platform acquisition made this year was by **Astrazeneca**, which paid US\$1.3 billion, for antibody company **Cambridge Antibody Technology**.

Implications for Australian biotech

The broad implication for Australian biotech companies is an increasingly positive sentiment to biotech stocks in the US as a result of major biotech acquisitions. The Nasdaq Biotech Index is up 9.3% since the end of June this year.

From a specific company perspective, two platform discovery companies in Australia, **Evogenix** and **Phylogica**, may become impending acquisition targets. Evogenix holds an antibody humanisation and optimisation technology. Its first major project for **GlaxoSmithKline** (GSK) was successfully completed recently and the com-

Cont'd over

pany is working on two projects for **CSL**. The company has an internal antibody program it is developing in the treatment of lung cancer in which it has finished humanisation and optimisation. Pre-clinical development is expected to be completed in mid next year ahead of clinical trials in 2008. The company has completed development on an antibody for the treatment of osteoporosis and is now seeking to out-license this product candidate. This week, Evogenix announced a collaboration with the **National Institutes of Health** in the US to develop antibody drugs against a new cancer drug target.

Evogenix is a strong candidate for acquisition in the next 12 months. CSL, which recently acquired **Zenith Therapeutics** to bolster its protein drug development assets, might look to secure the antibody optimisation and humanisation skills of Evogenix. Similarly, GSK may have similar intentions if impressed with Evogenix's capabilities following their collaborative relationship.

The acquisition by Amgen of a novel protein technology (Avidia) with commercial freedom to operate supports Phylogica's approach with its Phylomer technology and may also make that company an acquisition target if it generate specific, effective and durable drug candidates. Phylogica recently delivered its first set of phylomer peptides to its partner Opsona Therapeutics against a target linked to inflammatory diseases. The company also has a collaboration with **Johnson & Johnson** to provide its phylomer peptides against an undisclosed target or targets. Phylogica has an internal drug development program, including in the area of stroke treatment. It will seek to license its stroke drug compounds over the next 12 months.

Other M&A trends

Generic pharmaceutical companies have featured prominently in global M&A activity. Four major generics companies have been acquired (or in the process of) in the last 12 months, including **Mayne Pharma** in Australia, which has been bid for by **Hospira**. Six Australian life science companies have been acquired or bid for this year, with the common theme being that these companies were generating sales in all cases.

2006 Australian Biotech Acquisitions by International Companies (completed or in progress)

Company	Acquirer	Price	Date Deal announced
Vision Systems	Danaher Corporation	\$791 million	September
Mayne Pharma	Hospira	\$2.6 billion	September
Enterix	Quest Diagnostics	\$57 million	September
Gropep	Novozymes	\$96 million	August
Bresagen	Hospira	\$21 million	August
Scigen	Bioton	\$51 million	January

2006 Major Pharma/Medical Device Mergers (completed or in progress)

Company	Acquirer	Price	Date deal announced
Serono Int.	Merck KGaA	US\$13.3 billion	September
Bayer Corp.	Schering Corp.	US\$20 billion	March
Guidant Corp.	Boston Scientific Corp	US\$27 billion	January

2006 (selected) Platform Company Acquisitions (completed or in progress)

Company	Acquirer	Price	Date deal announced
Sirna Therapeutics	Merck	US\$1.1 billion	November
Avidia	Amgen	US\$290 million	September
CAT	AstraZeneca	US\$1.3 billion	May
GlycoFi	Merck	US\$400 million	May
Abmaxis	Merck	US\$80 million	May
Abgenix	Amgen	US\$2.2 billion	December (2005)

2006 (selected) Biotech Product Company Acquisitions

Company	Acquirer	Price	Date deal announced
Connetics Corporation	Stiefel Laboratories	US\$640 million	October
ICOS Corporation	Eli Lilly	US\$2.1 billion	October
Myogen	Gilead Sciences	US\$2.5 billion	October
Corus Pharma	Gilead Sciences	US\$365 million	July
Raylo Chemicals	Gilead Sciences	US\$148 million	June

2006 (selected) Generic Company Acquisitions

Company	Acquirer	Price	Date deal announced
Mayne Pharma	Hospira	US\$2.0 billion	September
PLIVA d.d	Barr Laboratories	US\$2.5 billion	June
Andrx Corporation	Watson Pharmaceuticals	US\$1.9 billion	March
IVAX	Teva Pharmaceuticals	US\$7.4 billion	January (completed)

There have been three major pharmaceutical/medical device mergers this year, the largest being the merger between **Boston Scientific** and **Guidant** for US\$27 billion. Also notable is the direction taken by the world's third largest biotech, **Gilead Sciences**, which has made three acquisitions this year, primarily to strengthen its later stage clinical pipeline.

Bioshares

The Bioshares 20 Index

Change from June 30, 2006
Change - week ago

16.1%
-0.6%

Nasdaq Biotech Index

Change from June 30, 2006
Change - (2/11 to 27/10)

9.3%
-1.2%

Incitive – Focusing on Autoimmune Diseases

Incitive (ICV: 16 cents) is one of only two biotech companies that have successfully listed on the ASX this year. Headed by former Agenix CEO, Don Home, Incitive is an early stage biotech that is focusing on therapeutics for autoimmune diseases, an area of the market that has become very attractive following the commercial success of TNF drugs Remicade, Humira and Enbrel. Most recently in Australia, Cytopia reached success with the autoimmune space in a major deal with Novartis, potentially valued as much as \$274 million based on the achievement of commercialisation milestones. Arguably, Incitive is attempting to follow in the footsteps of Cytopia with its two autoimmune disease programs.

Therapeutic programs

There are two distinct programs housed within the Incitive vehicle and the common link is the focus on autoimmune disease therapeutics. The Bromelain program is investigating the therapeutic application of protein fractions derived from pineapple extracts (bromelain). The other program, called PerfoRx, is seeking to inhibit a toxic protein secreted by the body's immune system.

Bromelain project

This project originates from work originally conducted by UK biotech Cortecs and the rights were subsequently acquired by Incitive's CSO, Dr Tracey Mynott. The rights to the intellectually property assets associated with this program have since been 100% acquired by Incitive.

Bromelain is a crude extract from pineapple stems and has been used for several decades in alternative medicine as a treatment for inflammatory disorders. Incitive is seeking to develop the active components within bromelain as more effective immunosuppressant agents for commercial applications.

There are two bromelain fractions identified, called CCZ and CCS, and it is the active enzyme components within these fractions, labeled ICV-0026 and ICV-0019, that have been selected as lead drug candidates.

Method of action of bromelain

The active enzyme components of bromelain have been shown by Mynott (published in *The Journal of Immunology* in 1999) to inhibit T-cell production via a signal transduction pathway. Activation of the intracellular signal transduction pathways has shown to produce highly specific and effective drugs, such as the oncology drug Gleevec. Cytopia's deal with Novartis covered the JAK 3 signal transduction pathway and compounds that Cytopia had produced to disrupt this pathway (or lines of communication within a cell, well before the signal is delivered to the cell nucleus to produce a particular protein, such as TNF).

Mynott showed that bromelain inhibited pathways inside the cell, such as the ERK-2 and Ras pathways, that form a part of MAPK (mitogen-activated protein kinases) signaling pathways. This is of relevance because this pathway has been well documented by

others of playing an important role in inflammatory diseases and cancer. Inhibition of these pathways has become an attractive and acknowledged therapeutic approach to attempt to tackle these diseases. Blocking Ras and ERK-2 is believed to inhibit the production of T-cells (by stopping the T-cell growth factor IL-2).

The therapeutic focus for these bromelain enzymes as planned by Incitive is firstly for the treatment of inflammatory bowel disease, followed by graft versus host disease (to prevent transplanted cells rejected by the immune system) then rheumatoid arthritis. The aim is to complete preclinical efficacy studies in the second half of 2007, before seeking to license the lead compounds. The company then plans to further develop secondary drug candidates in this area not covered by any licensing agreement and also in anticancer applications.

The bromelain fractions and actives are enzymes called proteases. Enzymes have traditionally been used as drug targets, not as drugs. Incitive is using a novel approach in drug development and if successful will be the first example of using a protease as a therapeutic compound.

Incitive has been created as a virtual biotech company, such that R&D is contracted out. For the Bromelain project, most of the preclinical work has been contracted out to the Queensland Institute of Medical Research, where Mynott is based.

Bromelain intellectual property

Incitive has filed patents in major regions covering the bromelain fractions and their uses as potential compounds for the treatment of immune system disorders, and as antimicrobial and anticancer agents. These patents have a priority date of 1997, and as such will expire in 2017.

The company has also been granted a US patent (5,928,640) for the use of bromelain in the treatment of diarrhoea and (5,824,305) for the use of bromelain in the treatment of a number of diseases including cancer and immune system disorders.

Incitive is strengthening its portfolio of patents for its bromelain program which is necessary given that any potential therapeutics will enjoy only short patent protection once they get to market with the patents filed to date.

PerfoRx program

The second program being undertaken by Incitive is based on technology in development at the **Peter MacCallum Cancer Centre**. Incitive has acquired a 60% interest in this technology, which is housed in the vehicle PerfoRx Pty Ltd.

The company is seeking to develop inhibitors to a protein that is secreted by the immune system, called perforin. The function and action of perforin within the body, until recently, has been poorly understood. Researchers at the Peter Mac have discovered a robust method to synthetically produce perforin (recombinant

Cont'd over

perforin), that had previously had been very difficult to achieve because of the toxic nature of the compound.

Being able to produce large quantities of perforin has allowed the researchers to now conduct screening studies to find potential inhibitors against this toxic protein.

Perforin has an important role within the body, largely to attack virus infected cells and foreign particles in the body. Perforin works by disrupting the cell membrane which then allows for the delivery of 'granzymes' that causes cell death. By developing potential inhibitors against this protein, Incitive is investigating whether immune system disorders, that result from an overly aggressive or out of sync immune system, can be controlled using perforin inhibitors.

There is a risk with most immune system modulator drugs, even such as the highly successful anti-TNF drugs, that inhibiting the immune system will make the body more susceptible to other illnesses or infections. The role of perforin in the body and its mechanism of action is evolving and only in recent years has much information been elucidated. It is a novel target for treating immune system disorders.

To date, the researchers at the Peter Mac have found 100 compounds that inhibit perforin and of these, three have been selected for lead optimization. This optimisation work is being carried out by Auckland Services under contract. Preclinical efficacy studies are expected to be completed by the end of 2007.

PerfoRx intellectual property position

PerfoRx filed a patent application (in 2005) that seeks to protect the company over its manufacturing process for recombinant perforin, which uses a retroviral expression system in mammalian cells to make perforin. Further patents will be filed over the next two years that will seek protection against lead compounds that modulate perforin activity.

Diseases targeted

Perforin function contributes significantly to the rejection of transplanted tissues and organs in patients and this will be the first targeted indication. It represents a multi-billion dollar market. Other potential autoimmune diseases that may be targeted include multiple sclerosis, lupus and rheumatoid arthritis.

Management & Board

Incitive has considerable experience at the management level. The CEO (2.5 days per week), Don Home, was formerly CEO of Agenix and prior to that worked for **Abbott Laboratories** for 14 years. The company's CSO, Dr Tracey Mynott, spent 11 years working for **Provalis** (previously **Cortecs Pharmaceuticals**) and more recently served as Head of Business Development at the **Queensland Institute of Medical Research**. The company at the board level is reflective of the company's founders and investors, and includes Sam Willis (from **Cygnit Capital**), David McAuliffe and Patricia Washer (**Gateway Capital**) and Tracey Mynott.

Discussion

Incitive is an early stage biotech company and that is reflected in its capitalisation of \$6.6 million. However, the company is working in the area of autoimmune diseases which has shown over the last five years to have tremendous commercial value for drug developers. Three autoimmune (anti-TNF) drugs, primarily for the treatment of rheumatoid arthritis, generated sales last year of US\$8.7 billion and the market for these types of drugs is expected to exceed US\$20 billion by 2012.

The company's commercial objective in the first phase of its business is to bring its first two programs to the end of preclinical studies and license out the lead compounds. A very appropriate and recent licensing deal is the one conducted by Cytopia with Novartis earlier this year.

The preclinical deal covered Cytopia's expertise and assets over the JAK3 kinase intracellular pathway and Cytopia will assist Novartis in developing inhibitors to this pathway for the prevention of transplant rejection and the treatment of autoimmune diseases such as rheumatoid arthritis. Under the terms of the deal, Cytopia was to receive \$13 million in upfront and research payments over the first two years, together with future milestone payments that in all could total \$274 million plus royalties from sale of any products arising from this research collaboration.

Incitive is awaiting the granting of key patents over the two technologies. Patent applications seeking to protect the PerfoRx technology will, if granted, offer longer patent protection having been filed only in the last two years. Patent applications over the Bromelain program have a much earlier priority date and the company will need to file further patents to support protection over the technology, which we believe the company is currently in this process.

Summary

Incitive is a start-up biotech company with early stage projects that seek to develop therapeutics to treat autoimmune diseases. The company's aim is to generate shareholder value by value-adding along the drug discovery and development pathway. Initial aims are to move the first two programs to the end of preclinical and then to out-license those programs. The company's PerfoRx program stems from research conducted at the highly respected Peter MacCallum Cancer Centre in Melbourne and the Bromelain program is seeking to develop highly specific therapeutics that act on a validated intracellular signalling pathway (MAPK). If the company can successfully out-license either of these programs over the next 18 months in a deal similar to the recent Cytopia/Novartis partnering deal, then it will arguably create significant shareholder value. At the end of September this year, the company had \$2.6 million in cash assets and an estimated annual burn rate of \$1.2 million.

Bioshares recommendation: Speculative Buy Class C

4.7B Reporting Companies – Cash Balances September 30, 2006 Commentary

The majority of listed life science companies are required to file cash flow statements with the ASX on a quarterly basis. This provides investors with a means to monitor the financial health of cash depleting biotech firms on more timely basis than is available through half yearly and annual reporting requirements.

A key analytical measure we present is the 'Survival Index' (SI). The index is derived for this quarter by dividing a company's annualised trailing five quarter average net operational cash into the company's cash balance. The index measures how many years those cash reserves will last, based on the company's recent spending patterns. It is limited because it does not account for companies that may ramp up spending in the next period of activity.

As a rule of thumb, companies that present with an SI of less than one are likely to be raising funds to support their activities, or are in the process of doing so. A healthy SI is either two or more. Companies with SIs of less than 0.5 may be in positions of funding stress and should therefore be investigated cautiously by investors.

For the September quarter 2006, we have tabulated the cash positions of 88 listed life science companies (see the next page), and calculated their respective Survival Indices.

For three companies, it was not appropriate calculate Survival Indices – **Cryosite**, **Pharmaust** and **Eastland Medical** – because these companies recorded positive net operational cash flow.

There are 127 life science companies listed in Australia. Of the 88 4.7B reporting companies, 42 recorded SIs of less than one, and 28 had, at September 30, less than 6 months cash at hand.

A number of these companies that are in financially stressed positions have subsequent to September 30, either raised capital or announced plans to raise capital.

Sunshine Heart shareholders approved a \$20 million capital raising in October. **Neuren Pharmaceuticals** raised \$1.6 million through an SPP and **Phylogica** raised 3.75 million through a placement and an SPP. The **Brain Resource Company** receipted \$1.5 million from a placement conducted in the June quarter.

Living Cell Technologies said it expected to raise US\$6 million from US investors in the current quarter, subject to shareholder approval. **Prima Biomed** expects to raise \$1 million through a placement.

Rockeby biomed (SI=0.0) completed a \$750,00 placement and intends to conduct a share purchase plan to raise \$1.7 million. The new management at **Eqitx** (SI=0.1) said it expected to raise funds in the next three months. **RiTract** (SI=0.0) announced plans to conduct a 2:7 rights issue to raise \$2 million.

Convertible Notes

Two companies that have opted to obtain funding through convertible notes were **Occupational and Medical Innovations** (up to \$2.8 million) and **RiTract** (\$1 million).

Sales of Investments

Norwood Abbey sold shares in its investee company, **Norwood Immunology** during the September quarter to the value of \$13.5 million, and post- Sept. 30, worth \$4 million. Should Norwood Immunology successfully complete a capital raising, then Norwood Abbey stands to be repaid a \$1.4 million loan. Norwood Abbey would then retain a 21.5% holding in Norwood Immunology.

Of concern

One of the more concerning stocks is **pSivida**, which recorded an SI of 0.3 The company said that it 'expects to close a non-market cash generating transaction in the current quarter using asset based finance'. Pending that event's occurrence, we have placed a **Speculative Hold Class B** on pSivida.

Bioshares

Bioshares Model Portfolio (3 November 2006)

Company	Price (current)	Price added to portfolio
Acrux	\$0.75	\$0.83
Alchemia	\$0.64	\$0.67
Avexa	\$0.270	\$0.15
Bionomics	\$0.20	\$0.210
Biosignal	\$0.18	\$0.22
Cogstate	\$0.18	\$0.20
Cytopia	\$0.675	\$0.46
Chemgenex Pharma.	\$0.49	\$0.38
Evogenix	\$0.600	\$0.47
Optiscan Imaging	\$0.490	\$0.35
Mesoblast	\$1.460	\$1.27
Metabolic Pharmaceuticals	\$0.725	\$0.53
Neuren Pharmaceuticals	\$0.44	\$0.70
Peptech	\$1.30	\$1.31
Pharmaxis	\$2.76	\$1.90
Prima Biomed	\$0.056	\$0.09
Progen Industries	\$3.400	\$3.40
Sirtex Medical	\$2.96	\$1.95
Sunshine Heart	\$0.17	\$0.19

Portfolio changes:

Progen Industries has been added to the portfolio at \$3.40

4.7B Reporting Companies – Cash Balances September 30, 2006 Sorted by Survival Index

Life Science Companies - Cash Balances Sept Q 2006

Code	Company	Cash End 30/09/06 (\$M)	Survival Index
1	CTE Cryosite	\$1.5	Not Appl.
2	EMS Eastland Medical Systems	\$0.6	Not Appl.
3	PAA Pharmaust	-\$0.8	Not Appl.
4	BZI Brainz	\$9.1	5.8
5	PXS Pharmaxis	\$90.9	5.6
6	ICV Incitive	\$2.6	4.8
7	NDL NeuroDiscovery	\$1.9	4.7
8	MAA Medec	\$4.9	4.7
9	MSB Mesoblast	\$19.6	4.1
10	BPH Biopharmica	\$2.8	4.1
11	CST Cellestis	\$12.6	3.8
12	CXD CathRx	\$8.9	3.4
13	GAA Genepharm	\$10.2	3.2
14	OBJ OBJ	\$2.8	3.1
15	BOS Biosignal	\$5.5	3.1
16	BOD BioMD	\$2.2	2.7
17	GIA Giaconda	\$3.8	2.7
18	HTW Heartware	\$28.6	2.5
19	PEP Peplin	\$31.3	2.4
20	BRC Brain Resource Corp	\$4.3	2.3
21	GTG Genetic Technologies	\$11.2	2.1
22	SIE Scigen	\$14.7	2.1
23	BPO BioProspect	\$1.6	2.1
24	ANP Antisense Therap.	\$7.6	2.1
25	NEU Neuren Pharmaceuticals	\$10.8	2.1
26	ACG Atcor	\$9.9	2.0
27	BIT Biotron	\$3.9	1.9
28	GBL Genesis Biomedical	\$2.0	1.9
29	XBL Xceed Biotech	\$4.6	1.8
30	ACR Acrux	\$16.6	1.8
31	SAH Salus technologies	\$1.1	1.8
32	AVS Avastra	\$3.4	1.7
33	UCM USCOM	\$6.1	1.7
34	SPL Starpharma	\$12.3	1.6
35	AVX Avexa	\$15.8	1.5
36	CGS Cogstate	\$2.2	1.4
37	IMU Imugene	\$2.3	1.4
38	NLS Narhex Life Sciences	\$3.5	1.4
39	CAU Colltech	\$2.8	1.4
40	ACL Alchemia	\$21.6	1.3
41	BNO Bionomics	\$5.6	1.3
42	DIA Dia-B Tech	\$2.4	1.3
43	EGX Evogenix	\$4.7	1.1
44	ABI Ambri	\$5.2	1.1
45	STI Stirling Products	\$2.4	1.1
46	RHT Resonance Health	\$3.0	1.0
47	CMQ Chemeq	\$19.1	0.9
48	BNE Bone Medical	\$1.9	0.8
49	AVP Acuron	\$1.8	0.8
50	TIS Tissue Therapies	\$2.5	0.8
51	IMI IM Medical	\$1.8	0.8
52	CYN Cygenics	\$3.9	0.7
53	PSX Psiron	\$3.7	0.7
54	MTY Medical Therapies	\$1.8	0.7
55	PLD Portland Orthopaedics	\$2.7	0.7

Life Science Companies - Cash Balances Sept Q 2006

Code	Company	Cash End 30/09/06 (\$M)	Survival Index
56	PXL Proteome Systems	\$5.0	0.7
57	PBT Prana Biotechnology	\$7.2	0.6
58	BDM Biodiem	\$1.8	0.6
59	CCE Clinical Cell Culture	\$6.0	0.6
60	SBP Solbec Pharm.	\$1.2	0.6
61	PYC Phylogica	\$1.6	0.5
62	PRR Prima Biomed	\$2.2	0.5
63	CUV Clinuvel Pharmaceuticals	\$5.7	0.5
64	SHC Sunshine Heart	\$3.1	0.5
65	HTX Healthlinx	\$1.0	0.5
66	OMI Occup. & Medical Innov.	\$0.9	0.5
67	AOP Apollo Life Sciences	\$3.0	0.5
68	PBI Premier Bionics	\$1.6	0.5
69	AOS Advanced Ocular Systems	\$1.2	0.4
70	VSG Visiomed	\$0.6	0.4
71	SLT Select Vaccines	\$0.3	0.3
72	PSD pSiVida	\$7.9	0.3
73	UNI Unilife	\$2.2	0.3
74	LCT Living Cell	\$2.1	0.3
75	BGN Bresagen	\$0.4	0.3
76	PCC Probiomics	\$0.7	0.3
77	SLA Solagran	\$0.5	0.3
78	SOM Somnosed	\$1.1	0.3
79	BLS Biolayer	\$0.6	0.2
80	BLT Benitec	\$0.9	0.1
81	MDM Medical Monitors	\$0.1	0.1
82	ALT Analytica	\$0.1	0.1
83	NAL Norwood Abbey	\$1.6	0.1
84	EQX Eqitx	\$0.1	0.1
85	MGZ Medigard	\$0.0	0.1
86	ACU Avantogen	\$0.5	0.1
87	RTL RiTract	\$0.0	0.0
88	RBY Rockeby Biomed	\$0.005	0.0
Total		\$521.1	1.3
Average		\$5.9	1.5
Median		2.6	1.0

Note: Small cap life science companies that are not required to comply with the 4.7B Rule include:

Agenix, Anadis, Biota, Circadian, Clovercorp, Compumedics, Chemgenex Pharmaceuticals, Cytopia, Eiffel Technologies, Ellex Medical Lasers, Gropep, IDT Australia, ITL Corp, Life Therapeutics, Metabolic Pharmaceuticals, Meditech Research, Medical Developments International, Novogen, Optiscan Imaging, Panbio, Progen Industries, Polartech, Phosphagenics, Peptech, Sirtex, Ventracor and Virax Holdings - (27 companies)

How Bioshares Rates Stocks

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

Group A

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

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

Group B

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

Speculative Buy – Class A

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

Speculative Buy – Class B

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

Speculative Buy – Class C

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

Speculative Hold – Class A or B or C

Sell

Corporate Subscribers: Phylogica, Neuren Pharmaceuticals, Pharmaxis, NeuroDiscovery, Prima Biomed, Biotech Capital, Cygenics, Psivida, Cytopia, Biodiem, Peptech, Starpharma Holdings, Cogstate, Xceed Biotechnology, Healthlinx, Incitive, Optiscan Imaging, Bionomics

Disclaimer:

Information contained in this newsletter is not a complete analysis of every material fact respecting any company, industry or security. The opinions and estimates herein expressed represent the current judgement of the publisher and are subject to change. Blake Industry and Market Analysis Pty Ltd (BIMA) and any of their associates, officers or staff may have interests in securities referred to herein (Corporations Law s.849). Details contained herein have been prepared for general circulation and do not have regard to any person's or company's investment objectives, financial situation and particular needs. Accordingly, no recipients should rely on any recommendation (whether express or implied) contained in this document without consulting their investment adviser (Corporations Law s.851). The persons involved in or responsible for the preparation and publication of this report believe the information herein is accurate but no warranty of accuracy is given and persons seeking to rely on information provided herein should make their own independent enquiries. Details contained herein have been issued on the basis they are only for the particular person or company to whom they have been provided by Blake Industry and Market Analysis Pty Ltd.

The Directors and/or associates declare interests in the following ASX Healthcare and Biotechnology sector securities: ACL, ACR, AVX, AVS, BLS, BOS, BTC, CCE, CGS, CYT, CXS, EGX, GRO, IMI, MBP, NEU, OIL, PXS, PRR, SHC, SPL, SLT, SRX. These interests can change at any time and are not additional recommendations. Holdings in stocks valued at less than \$100 are not disclosed.

Subscription Rates (inc. GST)

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

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

To subscribe, post/fax this subscription form to:

Bioshares
PO Box 193 Richmond VIC 3121
Fax: 61 3 9671 3633

I enclose a cheque for \$ _____ made payable to **Blake Industry & Market Analysis Pty Ltd**, or

Please charge my credit card \$ _____ MasterCard Visa

Card Number

Signature _____ Expiry date _____

Subscriber details

Name _____

Organisation _____

Ph () _____

Emails _____
