ISSN 1443-850X

In this edition...
We continue with coverage of the Bioshares Biotech Summit, held recently in Queenstown.
Bioniche CEO Graeme McRae related the history of Bioniche, highlighting three key turning points for the company since it was founded in 1979.
Cogstate Chairman Martyn Myer discussed his role as a patient investor in Cogstate, as well as several opportunities that lie ahead for the firm.
Acrux CEO Richard Treagus offered many pieces of salutary advice on biotech management, including time allocation, corporate values, partnering and working with the FDA
The Editors
Conference Coverage, Survival Analysis

	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 (May '07 - May '08)	-36%
Year 8 (May '08 - May '09)	-7.3%
Year 9 (May '09 - May '10)	49.2%
Year 10 (May '10 - May'11)	45.4%
Year 11 now commenced	-9.4%
Cumulative Gain	**281%**
Av Annual Gain (10 yrs)	**21.2%**

Bioshares is published by Blake Industry & Market Analysis Pty Ltd.
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) 9329 3350
Email: info@bioshares.com.au

David Blake
Ph: (03) 9326 5382
Email: blake@bioshares.com.au
Mark Pachacz
Ph:03 9348 9317
Email: pachacz@bioshares.com.au

Individual Subscriptions (48 issues/year)
$350 (Inc.GST)
Edition Number 418 (29 July 2011)
ISSN 1443-850X

Bioshares

29 July 2011
Edition 418

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

Bioniche's Three Turning Points

We follow in this edition with further coverage of sessions from the 7th *Bioshares* Biotech Summit, held recently in Queenstown.

Graeme McRae, the Australian born of CEO of Canadian biotech, Bioniche, gave an excellent overview of that company's corporate history as well as updating investors on the prospects for that company.

Bioniche listed in Canada in 1992 and then listed on the ASX in January this year. The company has three business divisions with three separate marketing teams: one in pharmaceuticals (bladder cancer Phase III trial underway); an animal health business (which generated sales of C$27 million in FY2010); and a food safety business (a vaccine for cattle against E.coli O157:H7).

McRae gave an excellent assessment of the turning points in the company's history, with a common element being the close association to Key Opinion Leader s(KOL) in particular areas of research.

Bioniche brings products through proof-of-concept and through to market. The company started in 1979 with funding from 95 vets with the aim of looking for alternatives to antibiotic use in livestock. At the time there were very few controls over antibiotic use. The company's first product was a vitamin product for horses, with those products today still generating sales of around $250,000 a year.

Bioniche has raised $200 million in debt/equity financing since inception. It previously sold a generics pharmaceutical business in Ireland, in which it had invested $6 million over 10 years. Bioniche did reasonably well receiving $56 million for the business and a further $10 million from an associated hyaluronic acid product. That business had €25 million in revenue. The group that purchased that business invested a further $150 million and later sold it for $550 million.

However McRae was very clear why the business was sold: to climb the margin chain and leverage the company into a Phase III trial for its bladder cancer program.

First Turning Point – Animal Health

According to McRae, when the company started out, 70% of the global market for animal health products was spread across 30 companies. Today that same 70% of global market share is concentrated in only six major companies. Bioniche has had to concentrate on niche markets, working under the radar of multinationals in product markets worth less that $100 million.

Bioniche's first breakthrough came in the follicle stimulating hormone (FSH) market. A KOL at a university expressed his frustration with a leading product product sold by a

– Cont'd over

multinational, which was more expensive to universities and had a product variability of 30%-40%, because it used a rat assay in manufacturing.

Bioniche developed an improved assay, using a radio-receptor, with Australian researcher David Armstrong. After eight months, Bioniche returned to the KOL with a product. McRae says that to date there are 550 publications, with half of those from the KOL. The lesson here, according to McRae, is to align yourself with a KOL. Today Bioniche has 70% of the global market for FSH.

Second turning point – Food Safety

The second turning point came in the food safety business. This is based around a vaccine for an E.coli vaccine where that bacteria produces the Shiga/Vero toxin in cattle. In Australia the level of infection of E.coli O157:H7 in cattle is very low, at 0.4 cases per 100,000 cattle, because most of the cattle are located inland, away from population centres. However, in Canada the infection rate is more than eight times greater.

An outbreak in a water reservoir caused 2500 people to become sick and seven deaths in one outbreak in Canada. The virus destroys red blood cells and damages the liver, causing life-long liver disease affecting also children. Outbreaks such as this one has seen the Canadian Government support the development of a vaccine, providing Bioniche with a $25 million loan to build a facility to make the vaccine.

The vaccine is the world's first against this strain of E.coli. The product is now registered in Canada and manufacturing is expected to start in early 2012. A potential Canandian government contract could give the company a revenue base of $30 million, said McRae, if it vaccinates all cattle in Canada. The vaccine has been fully licensed in Canada and the company is seeking to license the vaccine to multinationals for the rest of the world.

The turning point came because Bioniche supported a researcher working in this area who in turn contacted Bioniche once he had advanced a vaccine. Bioniche has invested $30 million in the vaccine over 10 years to develop what McRae said is very complex technology.

Third Turning Point – Bladder Cancer Product (Human Pharmaceuticals)

Bioniche had developed a Mycobaterial Cell Wall-DNA Complex (MCC) as an antiviral and antibacterial drug for use in horses (sold in Australia and the US) and as an antibacterial product for cattle (sold in the US). MCC is a powerful immune stimulant.

A number of years ago, the company was contacted by Alvaro Morales, the KOL in the area of bladder cancer. Morales developed the BCG vaccine used in 80% of bladder cancer treatments. McRae says he is an incredible KOL in this space, known as the grandfather of bladder cancer treatment by every urologist. Morales suggested the company apply its MCC product in bladder cancer, called Urocidin. (This week the company had invited Morales to Australia to meet with investors.)

Bioniche thought it would be reasonably straightforward to develop, listing the company and raising $4 million. It stopped all development of its vet products. The company has now invested $150 million in the program.

The company has partnered the program with **Endo Pharmaceuticals**, which wanted to extend its franchise from pain into women's health and urology. Bioniche successfully completed Phase I and II trials and one Phase III trial. Endo is now conducting the second Phase III trial, which is costing $90 million. Bioniche will receive a sales related transfer price, as well as retaining global manufacturing rights (which is a very appealing feature).

Bioniche received $20 million up front, and is eligible to receive a further $110 million (of which $18 million has been received). Endo is now responsible for all external development costs.

Pipeline

The second Phase III trial is expected to be finished at the end of this year, with the product to reach the market in the US by 2015. This product could also be applied to prostate cancer, however with 40 products in Phase III development McRae said it's a crowded space and infectious diseases may be better markets.

The *E.coli* vaccine should be released in Canada next year and then into other countries through new licensees.

Bioniche has a burn rate of $1 million a month. However the development costs for Urocidin should reduce, with now no more preclinical safety studies required for Urocidin, and Endo taking care of all clinical, regulatory and marketing costs.

Bioniche is currently conducting an acquisition in Australia in the animal health area (Plasvaac Holdings). The company is forecasting profitability in FY2013.

The company has five manufacturing sites in Canada, USA and Australia where product is made under GMP. It has raised $200 million in debt/equity financing since inception. Today it is capitalised at only $87 million, holding cash of C$26 million. Its revenue in FY2010 was C$45.9 million, with $27 million coming from the animal health business and the rest from licensing and milestone payments.

Bioshares

Cogstate's Patient Capital

Cogstate chairman, Martyn Myer, spoke on the topic of patient capital. Myer used to work for the late Richard Pratt in the 1980s and Pratt had said that it takes 15 years to build a good business. Myer believes Cogstate is on track in that regard.

Cogstate was formed in 1999, in fact at the same location as the summit was held, in Queenstown, New Zealand, by Myer, venture capitalist Geoff Brooke and scientist David Darby. Myer remains the largest shareholder in Cogstate at just under 20%. Myer, with a background in engineering, was drawn to the Cogstate because of the science behind the technology. The company listed on the ASX in 2004 to raise money, a little too early in hindsight, said Myer

Cogstate provides a rapid computerised test of cognition. The attraction of working in this space is that the baby boomers are creating a neuroscience demographic time bomb, said Myer. The company is operating in three major markets: clinical drug trials, where the company generates sales of $8 million a year; concussion management in sport (a joint venture called Axon Sports), which was launched in August last year; and it is looking to sell its product as a broad-based population dementia screening tool.

Cogsate's main selling point is the science that underpins the technology. Its prime marketing material is peer reviewed scientific papers, which Myer said around 300 have now been published, supporting all three market applications the company is currently addressing. One of the reasons it has taken Cogstate so long to get to this point has been the need to validate the science behind the technology.

Currency Issue

However, one issue for the company is that all invoices are written in US dollars. The company is working with all top 10 big pharma, its products are being used in over 800 clinical sites and is available in 40 different languages. Myer said the company has had to recently implement cost reduction strategies, having lost $1.5 million in margins due to the appreciating Australian dollar which has had a major impact on the company.

While the company had a break even operating result in the last financial year and has delivered the third consecutive year of positive cash flow, the market cap of the company ($11.3 million) remains less than the contributed equity ($14.3 million), another aspect of patient capital required in such companies.

The reasons Myer remains committed to Cogstate are two huge opportunities ahead for the company. The first is in concussion management in sport, which is a major issue in the US and following closely in Australia. In the US all but seven states have passed or pending legislation to dictate concussion management plans in contact sports.

The company is looking forward to revenue growth gaining traction from the Axon Sports concussion management joint venture in the forthcoming school year in the US. It has had some early success recently with the Mayo Clinic in Arizona, which is providing the Axon Sports test free-of-charge to 106,000 athletes, buying the tests in bulk from Axon Sports. (Our understanding is the Mayo clinic wants to be seen as the leading hospital for treating brain injury in Arizona, which is the reason it is supporting the rollout of the test).

In Australia, which Myer said was about 12 months behind the US, Toyota has sponsored the rollout of the test to 130 grass roots Australian Rules football clubs, giving 25,000 people access to the test at no charge. For Toyota, it's in line with its "Good for Footy" sponsorship program.

The second and larger consumer market opportunity for Cogstate is in dementia screening in the broader population. Big Pharma is working on disease modifying drugs that will be available sooner or later said Myer and one of the themes to emerge from this year's Alzheimer's conference (ICAD) was the need for early diagnosis.

Another driver in the US are reforms to Medicare introduced this year which includes reimbursement for an annual wellness test. Part of test is the provision for a cognitive assessment. Cogstate is now in discussions with two major pharmaceutical companies about opportunities in community-based dementia screening.

The Alzheimer's association in the US estimates there are somewhere between 75-100 drug candidates in clinical trials for Alzheimer's disease with Johnson and Johnson's bapineuzumab in 12 Phase III studies.

Although the clinical trials business is not an annuity style business that analysts like said Myer, the two larger opportunities ahead both offer these ongoing annuity style revenue streams. The company needs partners for both of these opportunities, having already partnered the sports concussion testing product in the Axon Sports joint venture .

Finance Update

In a recent update to investors, the Cogstate announced it had already signed US$3.9 million in contracts which should be recognised in the current financial year. Although revenue in US dollars was largely flat in FY2011 over the previous year, in Australian currency revenue fell by 14% to $8.1 million.

The first six months of this year has been the strongest on record with sales contracts worth US$5.5 million signed. For FY2011, the company generated a net loss of $0.8 million, with $0.6 million its share of the loss for Axon Sports and a $200,000 foreign exchange loss.

The company held cash of $3.3 million at the end of June. Recently the company has reduced its cost base by $1 million reducing its staff by 13. There will be some increases in US staff (adding an estimated $350,000 to its costs) in the current year for expected additional clinical trial work and the company will look to more align its costs base with its revenue base in the US.

Linking the External World with the Internal World of a Biotech

Richard Treagus, who was appointed the CEO of Acrux in May 2006, addressed the Bioshares Biotech Summit on his experience of managing Acrux from internal and external stake holders perspectives. His talk covered sub-topics such as the role of the CEO, corporate culture and values, and interactions with investors, pharma partners and the FDA.

The Role of the CEO

Treagus said that running a biotech company is a task confronted by complexity, ambiguity and a lot of risk, including technical, financial and commercial. Although Treagus said he spent much of his time thinking about how to manage risk, his job at the end of the day was to balance interests of various stakeholders and deliver total share returns. However, he said that he was not managing simply for profit, but also managing for organisational reputation. "Once you have shot your credibility, it's like cash – you don't get it back!" he said.

Treagus has not been one for micro-managing his business. "I talk about zooming in and zooming out. Sometimes you have to get right into the detail. Other times you have to play the ball wide and step back from the business," he said, adding "you don't need to manage every detail but you have to monitor detail."

When it comes to matters of conflict between stakeholders, Treagus' approach has been to default to the shareholders' perspective. "If it's the right thing for the business then make the call," he said.

In being a CEO, judgment and timing are frequently tested. "Some times acting slowly works, sometimes nailing things quickly works," he stated. However, on the problem of allocating time to different tasks Treagus said that he tries to minimise time spent on administrative activities as much as possible , followed by "maximising effort around the things that matter."

Treagus said that a problem for many CEOs is that they are "working *in* the business, not *on* the business. I spend a lot of time on business development and a lot of time with partners and also a lot of time with shareholders. That's where I feel value is added," he argued.

"My job is to simplify the themes in the business, to remove a lot of clutter, to remove complexity out of the day-to-day agenda – then drive hard at those issues," he said.

Corporate Values

Treagus discussed four values that underpin the Acrux business, including developing a sense of urgency, being results oriented, in particular those that build value for shareholders, an emphasis on innovation and maintaining integrity.

One thing he thought necessary in developing a culture of innovation was getting staff to believe they had a 'license to fail', to which he coupled the goal of also building a culture in which problems were elevated very quickly. Treagus argued this 'open' culture fostered resilience which in turn means there is less chance of over-reacting or under-reacting to a crisis, because staff will be talking about problems much earlier in the piece.

"Your team is your engine room, converting your strategy into results. You can't achieve extraordinary results with average people. You have to recruit A-players, which means have the individual ability, the right attitude and the aspirations. These are perhaps more important than academic qualifications," he said.

Investment Community

Over the years the Acrux investor base has changed although the business model has remained the same. In communicating with investors "We don't put out too much," according to Treagus. "We try to simplify things". However, he said that at Acrux they spend a lot of time 'setting the vocabulary'. "It's our responsibility to work with analysts to say 'these are the metrics' and to show how they link back to the business."

Treagus warned that companies need to be careful to not over-communicate, which sounds like a paradox. "Companies can put too much info out in front of them, but you set yourself up and run the risk of being contradicted," he said. Treagus said that it is easy to get pre-occupied with predicting success. He recommended that companies spend time mitigating risk or building alternatives. "When we put out guidance, that's the plan which leads back to KPIs in the business. But we will always be thinking of contingencies." Treagus also cautioned about putting out guidance about distinct binary outcomes (although he agreed that was not always possibly). "Avoid it where you can," he said.

Partnering

Treagus said at Acrux they had chosen to manage partnering activities in house rather than outsource it, adopting the same approach they use with IR. He said that in managing partnering activities that building trust fast was critical. "People do business with people that they know, that they like that the trust." According to Treagus "there is no such thing as a win-lose deal. That's a non-deal. There are some deals that should be walked away from. A lousy deal is worse than no deal. We have had some lousy deals and learnt from them."

However, Treagus believes that putting expectations around a deal price or deal terms out ahead of a deal structure was not a good idea. "I have never thought that was clever – it's like putting a reserve price out there in the public domain."

Working with the FDA

Acrux took its Axiron product through the FDA approval process, which Treagus said he found intense but productive. "I don't think there is such as thing as a perfect NDA. Every submission will have some hairs on it. That's the real world. It is important to anticipate bear traps, and develop contingencies around them," he said, adding that "there is no straight forward review process."

Treagus' advice to companies managing relationships with the FDA is to keep communications very tight. Acrux achieved this by using a project manager who was on the ground in the US (in Cincinnati), who talked to the FDA in US time, and who would then liaise directly with Treagus. "I think it is imperative that you keep that communication really, really tight and confidential," he concluded.

Bioshares

4.7B Reporting Companies – Cash Balances June 30, 2011

Sorted by Survival Index

	Code	Company	Cash Receipts ($M)	Nett Op. Cash Fl. ($M)	Cash End 30/6/11 ($M)	Survival Index	Comments/ Events post reporting date
1	MSB	Mesoblast	$0.0	$111.0	$263.2	Not App	
2	ACR	Acrux	$89.3	$67.4	$33.2	Not App	
3	GTG	Genetic Technologies	$18.2	$2.2	$5.1	Not App	
4	IMU	Imugene	$0.0	$1.2	$1.9	Not App	
5	RHT	Resonance Health	$1.8	-$0.6	$1.5	Not App	
6	SOM	Somnomed	$11.8	-$0.2	$3.9	Not App	
7	CBB	Cordlife	$25.9	-$1.5	$17.0	11.6	
8	NDL	NeuroDiscovery	$0.2	-$0.3	$2.7	8.2	
9	OBJ	OBJ	$0.0	-$0.9	$4.8	5.2	
10	RVA	Reva Medical	$0.0	-$7.4	$68.9	4.6	
11	PRR	Prima Biomed	$0.0	-$13.0	$55.9	4.3	
12	AVH	Avita Medical	$2.9	-$3.0	$12.7	4.2	
13	TIS	Tissue Therapies	$0.5	-$4.3	$15.4	3.6	
14	ADO	Anteo Diagnostics	$0.8	-$2.1	$6.9	3.3	
15	AVX	Avexa	$0.0	-$5.2	$16.4	3.2	
16	BRC	Brain Resource Corp	$0.9	-$2.8	$8.4	3.0	
17	SPL	Starpharma	$2.2	-$6.6	$18.9	2.9	
18	HCT	Holista Colltech	$6.0	-$0.5	$1.0	2.2	
19	BLT	Benitec	$0.2	-$3.2	$6.7	2.1	
20	PCC	Probiomics	$0.9	-$0.1	$0.1	2.1	
21	NEU	Neuren Pharmaceuticals	$0.7	-$0.8	$2.9	1.9	
22	BNO	Bionomics	$4.4	-$8.4	$16.1	1.9	
23	PBT	Prana Biotechnology	$0.0	-$4.7	$8.8	1.9	
24	CUV	Clinuvel Pharmaceuticals	$0.2	-$9.5	$17.5	1.8	
25	LBT	LBT Innovations	$0.0	-$1.8	$3.3	1.8	
26	PYC	Phylogica	$2.2	-$3.0	$5.2	1.7	
27	UBI	Universal Biosensors	$8.8	-$5.1	$17.5	1.7	
28	VLA	Viralytics	$0.0	-$3.0	$5.0	1.7	
29	IPD	Impedimed	$3.8	-$11.3	$17.9	1.6	
30	GBI	Genera Biosystems	$0.1	-$1.7	$2.7	1.6	
31	MLA	Medical Australia	$8.6	-$0.5	$0.8	1.6	
32	ACU	Acuvax	$0.0	-$0.7	$1.0	1.4	
33	NAN	Nanosonics	$1.9	-$9.1	$12.4	1.4	
34	AHZ	Allied Health	$0.2	-$1.1	$1.4	1.3	
35	ANP	Antisense Therap.	$0.0	-$1.9	$2.3	1.2	
36	PAB	Patrys	$1.2	-$5.1	$6.2	1.2	
37	PXS	Pharmaxis	$1.3	-$37.4	$44.3	1.2	
38	BIT	Biotron	$0.0	-$2.0	$2.1	1.1	
39	EMS	Eastland Medical Systems	$3.4	-$3.3	$3.5	1.1	
40	ACW	Actinogen	$0.0	-$0.8	$0.9	1.1	
41	BDM	Biodiem	$0.3	-$2.6	$2.6	1.0	
42	UCM	USCOM	$0.7	-$2.2	$2.1	1.0	
43	HCG	Helicon Group	$0.0	-$1.0	$0.9	1.0	
44	BCT	Bluechiip	$0.0	-$1.6	$1.5	0.9	
45	ACG	Atcor Medical	$7.7	-$1.9	$1.7	0.9	
46	TDX	Tyrian Diagnostics	$1.0	-$3.6	$3.2	0.9	
47	LCT	Living Cell Technologies	$0.2	-$5.7	$4.5	0.8	
48	CXD	CathRx	$0.2	-$7.0	$5.2	0.7	
49	UNI	Unilife	$5.3	-$27.2	$19.3	0.7	
50	CDY	Cellmid	$0.1	-$2.3	$1.6	0.7	
51	AGX	Agenix	$0.0	-$2.8	$1.9	0.7	
52	SHC	Sunshine Heart	$0.5	-$10.1	$6.0	0.6	Completed $4.6M placement; intends to raise another $9.1M, s.t. sh. app.
53	OMI	Occup.& Medical Innov.	$0.0	-$0.7	$0.4	0.5	
54	ACL	Alchemia	$0.0	-$11.6	$5.6	0.5	Recent FDA approval of generic drug expected to trigger funding activities
55	BPO	BioProspect	$0.3	-$3.6	$1.7	0.5	
56	LER	Leaf Energy	$0.1	-$1.8	$0.8	0.5	
57	IMI	IM Medical	$3.7	-$1.1	$0.4	0.4	
58	QRX	QRxPharma	$0.0	-$22.2	$7.3	0.3	Completed $25M placement; undertaking 1:20 rights issue to raise $10.4 M
59	SLA	Solagran	$1.0	-$7.5	$2.4	0.3	
60	SIE	Scigen	$6.9	-$4.3	$2.8	0.3	
61	CBZ	Cbio	$0.3	-$13.3	$3.9	0.3	Access to $7.7 M of Springtree facility remains
62	KSX	KarmelSonix	$0.4	-$5.1	$1.3	0.3	
63	AYX	Austofix	$1.8	-$1.2	$0.1	0.1	Has drawn down $400K of $1M bank facility
64	HTX	Healthlinx	$0.0	-$2.7	$0.1	0.0	Has entered into $3M funding agreement with US investor
65	BNE	Bone Medical	$0.0	-$0.7	$0.0	0.0	Has converted $195K of US$1.5 Con. Note
66	ALT	Analytica	$0.0	-$0.7	$0.0	0.0	Line of credit increased up to $600,000
67	MGZ	Medigard				DNR	DNR - Did Not Report
68	STI	Stirling Products				DNR	DNR - Entered Voluntary Administration

Bioshares Model Portfolio (29 July 2011)

Company	Price (current)	Price added to portfolio	Date added
Acrux	$4.10	$3.37	June 2011
Psivida	$4.25	$3.95	May 2011
Bioniche	$0.85	$1.35	March 2011
Somnomed	$1.45	$0.94	January 2011
Phylogica	$0.068	$0.053	September 2010
Sunshine Heart	$0.038	$0.036	June 2010
Biota Holdings	$0.97	$1.09	May 2010
Tissue Therapies	$0.57	$0.21	January 2010
Atcor Medical	$0.12	$0.10	October 2008
Impedimed	$0.65	$0.70	August 2008
Patrys	$0.09	$0.50	December 2007
Bionomics	$0.64	$0.42	December 2007
Cogstate	$0.14	$0.13	November 2007
Sirtex Medical	$5.10	$3.90	October 2007
Clinuvel Pharmaceuticals	$1.70	$6.60	September 2007
Starpharma Holdings	$1.55	$0.37	August 2007
Pharmaxis	$1.10	$3.15	August 2007
Universal Biosensors	$1.08	$1.23	June 2007
Alchemia	$0.71	$0.67	May 2004

Portfolio Changes – 29 July 2011

IN:
No changes.

OUT:
No changes.

4.7B Reporting Companies – Cash Balances June 30, 2011 (Cont.d)

Legend:

Not App. : The SI calculation for these companies is not calculated due to the companies reporting positive operational cash flows, or in some cases marginally negative operational cash flows.

A: The SI calculation for these companies is based on the last four quarters NOCF.

CY: The SI calculation for these companies is calculatedthe last two quarters of NOCF, annualised.

Commentary

At June 30, 2011, from a reporting pool of 68 companies, we calculated 23 companies to have a Survival Index of less than 1, with another two companies failing to report their cash position by the required date. One of these, Stirling Products recently entered into Voluntary Administration. Ten companies were calculated to have less than six months cash at hand, although most had some sort of funding provisions in place post June 30. QRxPharma, which recorded a Survival Index figure of 0.3, completed a $25 million placement and is seeking to raise another $10.4 million through a rights issue. On an adjusted basis QRxPharma's SI would be 1.9 .

Each quarter, the majority of ASX listed biotech companies are required to report their cash positions. In turn, a key analytical measure we present each quarter is the 'Survival Index' (SI). The index measures how many years those cash reserves will last, based on a company's recent spending patterns. It is limited because it does not account for companies that may increase spending in the next period of activity.

The index is derived for this quarter by dividing the average of net operational cash flows (NOCF) for the last four quarters ending June 30, 2011, into each company's cash assets as recorded at June 30, 2011. For companies that report on Dec 31 full year basis, the index is based on two quarters of net operational cash flows (NOCF) annualised. The NOCF is the net of receipts and outgoings incurred in support of operational activities.

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 then 0.5 may be in positions of funding stress and investors should investigate such stocks with a greater degree of concern.

Small cap life science companies that are not required to comply with the 4.7B Rule include:Advanced Medical Design and Manufact., Immuron, Biota Holdings, Bioniche, Cogstate, Cellestis, Circadian Technologies, Clovercorp, Compumedics, Cryosite, Cyclopharm, Telesso Technologies, Ellex Medical Lasers, IDT Australia, ITL Corp, Calzada, Medical Developments Int., Novogen, Optiscan Imaging, Progen Pharm., Phosphagenics, Sirtex Medical and Virax Holdings.

Re-domiciled companies,pSvida and Heartware International no longer comply with the 4B Rule.

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. For both groups, the rating "Take Profits" means that investors may re-weight their holding by selling between 25%-75% of a stock.

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: Pharmaxis, Starpharma Holdings, Cogstate, Bionomics, Circadian Technologies, Biota Holdings, Mayne Pharma Group, Impedimed, QRxPharma, Patrys, LBT Innovations, Hexima, Mesoblast, Atcor Medical, Tissue Therapies, Viralytics, Phosphagenics, Immuron, Phylogica, Bluechiip, pSivida

Subscription Rates (inc. GST)

48 issues per year (electronic distribution): **$350**

For multiple email distributions within the same business cost centre, our pricing structure is as follows:

$550	2-3 email addresses
$750	4-5 email addresses
$950	6-10 email addresses

To subscribe, post/fax this subscription form to:

Bioshares
PO Box 193 Richmond VIC 3121
Fax: +61 3 9329 3350

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 ________________