ISSN 1443-850X

Companies covered: BNO, CGS, NAN, VLA, Cash 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)	70.6%
Year 4 (May '04 - May '05)	-16.3%
Year 5 (May '05 - May '06)	77.8%
Year 6 (May '06 - May '07)	17.4%
Year 7 (May '07 - May '08)	-36%
Year 8 (May '08 - May '09)	-7.4%
Year 9 (May '09 - May '10)	50.2%
Year 10 (May '10 - May'11)	45.4%
Year 11 (May '11 - May '12)	-18.0%
Year 12 (May '12 - May '13)	3.1%
Year 13 (May '13 - May '14)	26.6%
Year 14 (May '14 - current)	15.0%
Cumulative Gain	**418%**
Av. Annual gain (14 yrs)	**17.2%**

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Bioshares

1 May 2015
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Delivering independent investment research to investors on Australian biotech, pharma and healthcare companies.

Cogstate – US$22 M Contracts Signed In FY2015

For the last three years Cogstate's (CGS: $0.24) clinical trials business has been in decline. While its clinical trial revenue had been relatively constant at $10.7 million, $11.3 million and $11.0 million for the last three years (2014, 2013, 2012), the value of contracts signed had been declining from US$14.0 million in 2012 to US$11.5 million in 2013 and then $9.0 million in 2014.

Over the last year, however, the company has made some important changes to its business which is quickly paying off. In this financial year up to the end of April (10 months), the company has already signed contracts valued at US$22.1 million ($28.3 million).

The first major change made by the company is the introduction of new product offerings to its clinical trials business.

Rater Training

The first of these has been the Rater Training services for Alzheimer's disease clinical trials, which involves training staff to apply standard 'pencil and paper' cognition tests to ensure consistency across clinical trials sites. This has resulted in the company signing its largest contract to date last year worth $7.3 million. This is a generic service offering but allows Cogstate to expand the scope of its work with the same customers.

Precision Recruitment

Last year the company also introduced a product called Precision Recruitment, which allows the company to use its proprietary cognition testing platform to screen patients with a high probability of disease in Alzheimer's disease trials.

Screening is potentially a very high margin business for Cogstate, with the company receiving a success fee for each patient it correctly identifies with early stage disease. It signed two contracts last year which are expected to generate between $3-$6 million in revenue over the course of those contracts. Only $0.3 million of revenue has been achieved from these contracts on the first three quarters of this financial year with the majority of this revenue expect to be generated in the next financial year.

This product was only in beta mode development when the contracts were signed with the first commercial version of the product launched earlier this month. This product is now being used by its customers to recruit patients in Alzheimer's disease trials through online screening using the Cogstate test.

Business Reorganisation

The third and possibly most significant change the company has made is a reorganisation of its clinical trials sales team. The company has previously used sales staff who have a scientific background to sell its products and services to biotech and pharmaceutical companies. Its new business development (BD) group is now a pure sales team and that change is already delivering results.

Cont'd on page 3

Bioshares Biotech Summit 2015

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Rick Carreon – Impedimed
Michael Kotsanis – Acrux
Mark Heffernan – Nexvet
Andrew Ronchi – Dorsavi
Paul Macleman – IDT Australia

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Nanosonics – A Sales Pause On The Way To Direct Sales In The USA

Nanosonics (NAN: $1.615) released its quarterly sales results this week. As forecast by the company, sales had slowed, to $3.7 million for the quarter, as the company transitions to selling direct in the US, whilst still having its partner GE Healthcare selling the Trophon EPR systems on a non-exclusive basis.

Nanosonics has hired most of an additional 15 sales people to give the company a 21 person sales team in the US. The company has $51.5 million in cash to support its more direct sales approach in the US. The company now has over 4,500 Trophon units installed in the US, with the potential market being around 40,000 installed systems.

In the US, the company expects to expand the number of hospitals and clinics that use the Trophon system, as well as increasing the use of its ultrasound probe disinfection system into more departments within the hospitals. In the UK, where the company has been selling direct, the company averages six systems per hospital. In the US, the company has less than three systems installed per hospital. Potentially the direct sales approach in the US will assist with achieving a higher number of unit sales per hospital. Currently the Trophon system is in use in over 1600 hospitals in the US.

CEO of Nanosonics, Michael Kavanagh, said that sales by the company's direct sales team in the US are currently not significant but are expected to grow steadily from now. The company's direct sales operation is expected to be fully operational by the end of June. Sales for the full year are expected to match the previous year sales as a minimum.

Consumable sales in the last quarter contributed to around 50% of total sales, due to the lower number of Trophon systems sales. Consumable sales are expected to return to around 25% of total sales.

Relocation to the new manufacturing centre in Sydney is expected to be completed this quarter, with approval received to manufacture from this new facility now in place.

Nanosonics is capitalised at $454 million.

Bioshares recommendation: **Speculative Hold Class A**

Bioshares

– Cogstate cont'd

Cogstate's new BD manager was appointed in October last year with five other positions either filled or being filled. Its BD team will consist of six staff with a European BD manager as well. This team will be supported by Cogstate's scientific team. Cogstate currently employs around 80 staff.

CEO Brad O'Connor said that the outcome is a fundamental validation that a market exists that can be realised with proper sales resources employed. This week the company announced it had signed a US$4.9m million ($6.3 million) contract to measure cognition in a depression drug study. That trial consists of a number of separate trials. Because the company charges an early fee when its software is provided to each of the trials, the company will recognise a larger, earlier fee with this contract, which is expected to total $3.75 million (60% of contract value) in the current financial year.

Activity Measure

Arguably an important forward metric for investors is the number of clinical trials the company is bidding for at the moment, which is two to three times more than normal levels according to O'Connor.

In order to facilitate better transparency into the company's business, Cogstate is breaking down its revenue into 'software and services' and 'pass-through cost recoveries'. Pass-through costs includes external costs such as translations of product material and is not part of the clinical trial contract work quoted by the company (i.e. not part of the US$22.1 million in contracted sales this financial year).

With the company having sold off its loss-making Axon Sports business last year, assessment of future profitability will now be more easily calculated, after taking into account its fixed costs and gross margins on sales.

For FY2015, based on work contracted to date, Cogstate expects to generate revenue from its products and services of $15.6 million, with a total revenue of $18.1 million (adding pass-through costs). This assumes no further contracts are signed in May and June.

Cogstate expects to generate a positive EBITDA in the second half of this financial year. The company is seeking to maintain profitability from that point. Subsequent years will be underpinned by existing sales contracts, which will deliver an estimated $8.5 million in revenue in FY2016, $5.5 million in FY2017, and $5.8 million in FY2018. These do not include revenue from existing Precision Recruitment contracts (which should mostly be recognised in FY2016), and any future contracts signed.

O'Connor said the company is bidding for a record level of new contracts. There is a substantial level of work in the Alzheimer's disease space according to O'Connor. In our view, this should continue to grow following the positive results generated by Biogen in a Phase Ib trial, supporting the beta amyloid inhibition approach to treating disease. Biogen has confirmed it is moving into two major Phase III studies and other groups such as Roche are resurrecting similar programs that had previously failed in the clinic. O'Connor said that Biogen, through its positive trial outcome, had confirmed that the correct status of patients entering Alzheimer's disease trials is critical to the trial outcome.

Cogstate is capitalised at $24 million. The company had $3.2 million cash at the end of March.

Bioshares recommendation: **Speculative Buy Class A**

Bioshares

Positive News For Viralytics With FDA Advisory Panel Voting In Favour Of Amgen's T-Vec

Viralytics (VLA: $0.445) received positive news by proxy this week when an FDA Advisory Panel voted 22 to 1 in favour of Amgen's T-Vec drug candidate with respect to its risk/benefit profile.

If approved in coming months, which is now very likely, then it will be the first oncolytic virotherapy approved for medical use in the US. This is very good news for Viralytics, which is one of the leading biotechs behind Amgen in the oncolytic virotherapy space.

The reason it is positive for Viralytics that a competitor is likely to get approval from the FDA is because Amgen is driving a path forward through regulatory channels, not just its own, but for other oncolytic virotherapy companies. Had Amgen received a negative review from the panel, which was possible given some of the safety concerns flagged in the FDA briefing document, then the uncertainty for Viralytics and its own program would have been viewed as greater, even though its therapy does not share the same safety issues.

FDA Concerns with T-Vec

The FDA briefing document for the Advisory Panel provided some valuable insights into Amgen's T-Vec drug candidate, particularly around safety concerns.

There were 436 patients with advanced melanoma involved in just one Phase III study, with two thirds receiving T-Vec. The study was conducted in the US, Canada, South Africa and the UK. The trial was conducted under a Special Protocol Assessment agreement with the FDA. The control arm treatment was GM-CSF, because T-Vec is a genetically modified herpes virus that expresses GM-CSF to enhance tumour antigen presentation to the immune system and induce a systemic immune response.

Earlier Stage Patients to Benefit Most

Interesting data that came out of the Phase III trial was that patients who benefited most were the healthier patients. The Endpoint Assessment Committee (EAC) measured that a durable response was achieved in 16.3% of patients, compared to 2.1% in the control arm. This was the primary endpoint, with clear statistical significance ($p<0.0001$).

A durable response is defined as a partial or complete response in tumours that is maintained for at least six months starting within one year from initial treatment. It was found that the therapy delivered a substantially better treatment outcome if received earlier in the disease; in patients with Stage III disease, a durable response rate of 33% was achieved, compared to a 3.1% and 7.5% response in patients with Stage IVM1b and Stage IVM1c disease respectively.

It was also found that patients who received the drug as a first line therapy achieved a durable response rate of 23.9% compared to only a 5.6% durable response for patients receiving T-Vec as a second line or later treatment option.

On the secondary measure of overall survival, patients receiving T-Vec achieved a median overall survival of 23.3 months, compared to 18.9 months for the control arm ($p=0.051$), representing a 4.4 month survival benefit that narrowly missed achieving statistical significance.

An issue that the FDA had with the results was that while only 10% of patients had their largest melanoma lesion less than $1cm^2$ in size, these patients contributed to 30% of the overall durable response.

There was also limited evidence of a systemic effect with T-Vec, with the effect on subclinical micrometastases in question if there is limited systemic action.

Safety Issues

There were several safety issues linked to T-Vec. In the T-Vec arm, 25.7% of patients experienced serious adverse events (with 13.4% serious adverse events in the control arm). One patient receiving T-Vec required a limb amputation, with T-Vec treatment being linked to the outcome. And the issue of herpes virus shedding and possible infection of healthcare workers was cited as a potential risk with the treatment. Amgen has proposed a pharmacovigilance plan.

Comments (re Viralytics)

Viralytics will have received valuable guidance on its program after viewing the assessment of T-Vec by an FDA Advisory Panel. The safety profile of T-Vec is in stark contrast to Viralytics' virus therapy that does not exhibit any Grade 2, 3 or 4 adverse events, whilst achieving a similar tumour response rate in its Phase II CALM study.

The risk of virus shedding to healthcare workers does not apply to Viralytics CAVATAK, which uses a largely benign virus, Coxsackievirus.

In practice, oncolytic virotherapies are expected to be used in combination therapies with the emerging checkpoint inhibitors. Both Viralytics and Amgen are currently conducting combination therapy trials with these checkpoint inhibitors. On that point, the gap between Viralytics and Amgen with their programs is not substantial.

Viralytics CEO McColl said "Oncolytic virotherapy has taken a big step forward today and it is great timing for Viralytics with a strong and building data set across a number of indications and combinations."

Viralytics is capitalised at $82 million.

Bioshares recommendation: **Speculative Buy Class B**

Bioshares

Bionomics Launches Phase II Anxiety Trial

Company
Bionomics
Drug Candidate
BNC210
Target Indications
Generalised Anxiety Disorder (GAD)
Trial Title
NA
Design
Randomised, double blinded, placebo and lorazepam controlled, four-way cross over
Trial Code
BNC210.006
Phase
Phase II
Enrollment
24 untreated GAD subjects
Expected Completion / Data Availability
2016 Q2/ Results 2016 Q3
Dosing
BNC210: 300mg, 2000mg
Primary Endpoint
Changes on cerebral perfusion using ASL in the resting state; changes in task-related brain activity
Secondary Endpoints
Effect on defensive behaviour; effect on affective self-reporting of anxiety; safety and tolerability

About BNC210

BNC210 is a negative allosteric modulator of the alpha 7 nicotinic acetylcholine receptor. The potential benefit of the compound is that it could deliver the anti-anxiety effects of the benzodiazapene drugs such as diazepam or lorazepam without their side effects. The compound has been evaluated in 154 subjects to date.

History

BNC210 was originally partnered with Ironwood Pharmaceuticals in January 2012. The program was handed back to Bionomics in November 2014, with Ironwood retaining a small royalty interest in BNC210. Ironwood completed one trial of BNC210, a single ascending dose study in a capsule formulation.

Bionomics has secured US$10 million in funding from the Silicon Valley Bank to support the clinical development of BNC210. The terms of this funding are not known.

Bionomics (BNO: $0.405) has initiated a Phase II trial of its anti-anxiety compound BNC210 in 24 subjects diagnosed with with general anxiety disorder (GAD). The subjects will not have previously received medication for their condition.

The trial, BNC210.006, has a randomised, double-blind, four-way cross over design. This means that each of the 24 subjects will serve as their own control, receiving placebo, lorazepam (a drug currently used to treat anxiety) and two difference doses of BNC210, 300mg and 200 mg.

The trial is expected to conclude in 2016 Q2, with results available the following quarter.

The trial will take advantage of a relatively new brain imaging approach, which involves the measurement of blood flow (cerebral perfusion) using a technique called arterial spin labelling (ASL). The focus of the study is to gauge effects on the amygdala, the part of the brain that is responsible for emotional functioning. In times of anxiety, blood flow to the amygdala is increased. The subjects will be presented with 'emotional' faces, e.g. an image of an angry face, during the study, to stimulate anxiety.

Another test will be a joystick operated runway task (in conjunction with a computer screen). In this test of flight from threat, the threat is represented as a red dot, which pursues the subject, who is represented by a green dot. A harmless electric shock is delivered to the subject if the green dot is contacted by the red dot. Sensors in the joystick can also measure the pressure of the subject's hands on the joy stick.

A second joystick test will evaluate risk behaviour by requiring a subject to ensure its green dot pursues a red dot travelling at a constant speed, the goal being to avoid collision.

According to CEO Deborah Rathjen, fear extinction is important for post-traumatic stress disorder (PSD) and panic attack patients. A good read-out from the joystick tests would increase the relevance of the drug in treating PTSD and panic attack, she said, which could then lead to studies being initiated in those areas. Also mooted by key opinion leaders is the possibility for evaluating BNC210 in patients with bi-polar depression, who also suffer from anxiety.

A Phase I trial of BNC210 currently underway is assessing four different doses of BNC210, delivered twice a day for eight days, to further study safety and tolerability. Furthermore, the trial includes a nicotine challenge so that the pharmacokinetic profile of the compound's effect on cognition and response to nicotine can be explored. This study is using EEG measurements.

Comments

There is a significant opportunity for drugs that can treat anxiety disorders without incurring deleterious side effects such as sedation, addiction, memory loss, suicidal thoughts and loss of sexual function. Bionomics believes that BNC210 can address these issues as well as offering a fast-acting, once-a-day, oral dosing formulation. Gaining clinical insights for the potential of BNC210 to treat not just one, but several poorly served anxiety related disorders is well worth pursuing.

A **Speculative Hold Class A** recommendation is maintained for Bionomics shares. The company's cancer drug development programs are much less competitive than its CNS assets and drug discovery and development. Freeing up the company's asset base so that it can focus on CNS drug development could unlock significant value with this stock.

Bionomics is capitalised at $170 million and retained cash of $33 million at March 31, 2015.

Bioshares recommendation: **Speculative Hold Class A**

4.7B Reporting Companies – Cash Balances March 31, 2015

Sorted by Survival Index

	Code	Company	Cash Receipts ($M)	Nett Op. Cash Fl. ($M)	Cash End 31/03/15 ($M)		Survival Index	Comments/Events post reporting date
1	BNO	Bionomics	$25.0	$11.9	$33.1	A	**Not App**	
2	BXN	Bioxyne	$1.2	$0.0	$1.2	A	**Not App**	
3	HCT	Holista Colltech	$4.8	$0.1	$0.7	A	**Not App**	
4	NAN	Nanosonics	$25.1	$3.2	$51.5	A	**Not App**	
5	OSL	Oncosil Medical	$0.0	$0.2	$7.2	A	**Not App**	NOCF include $2.8 M in tax refunds
6	RHT	Resonance Health	$1.9	$0.1	$2.9	A	**Not App**	
7	ACL	Alchemia	$4.8	-$0.5	$10.7	A	15.0	Spent $1.4 M on R&D during quarter
8	SOM	Somnomed	$21.9	-$0.5	$8.5	A	11.6	
9	VLA	Viralytics	$0.0	-$2.5	$23.5	A	6.9	
10	ANR	Anatara Life Sciences	$0.0	-$1.3	$6.0		3.6	
11	BLT	Benitec Biopharma	$0.2	-$5.6	$26.7	A	3.6	
12	IPD	Impedimed	$3.3	-$7.8	$36.0	A	3.5	
13	UBI	Universal Biosensors	$4.1	-$0.5	$14.8	**CY**	3.1	In qtr, spent US$200 K to extend US$10 M Athyrium option
14	NEU	Neuren Pharmaceuticals	$1.0	-$2.1	$20.1	**CY**	3.0	
15	PYC	Phylogica	$0.8	-$0.9	$3.1	A	2.8	
16	GBI	Genera Biosystems	$0.3	-$0.6	$2.0	A	2.7	
17	CUV	Clinuvel Pharmaceuticals	$2.0	-$3.6	$11.4	A	2.3	
18	ADO	Anteo Diagnostics	$2.0	-$2.0	$5.7	A	2.1	
19	AGX	Agenix	$0.0	-$0.7	$1.8	A	2.1	Settled dispute with OKS (which will gain Thromboview)
20	OBJ	OBJ	$0.1	-$1.5	$4.1	A	2.1	
21	CYP	Cynata	$0.0	-$2.1	$5.5	A	2.0	
22	LCT	Living Cell Technologies	$0.9	-$2.4	$6.3	A	2.0	
23	SPL	Starpharma	$4.5	-$9.8	$24.7	A	1.9	
24	BRC	Brain Resource Corp	$1.0	-$2.4	$5.9	A	1.9	
25	PBT	Prana Biotechnology	$0.0	-$12.8	$31.6	A	1.9	
26	OSP	Osprey Medical	$0.0	-$3.9	$26.7	**CY**	1.8	
27	GTG	Genetic Technologies	$2.1	-$8.4	$20.2	A	1.8	
28	PXS	Pharmaxis	$14.5	-$9.6	$23.0	A	1.8	Receipts inc $1.8 M option pmt, $8.8 M reimbursement
29	PAA	Pharmaust	$1.8	-$1.1	$2.6	A	1.7	
30	PRR	Prima Biomed	$5.8	-$4.3	$8.0	A	1.4	In qtr, announced prioritising of IMP321
31	IMU	Imugene	$0.0	-$1.4	$2.6	A	1.3	
32	OCC	Orthocell	$0.9	-$2.7	$4.9	A	1.3	Filed new HerVaxx patent, pot.extend pat to 2036
33	PAB	Patrys	$2.1	-$3.2	$5.7	A	1.3	James Campbell appointed CEO
34	RVA	Reva Medical	$0.0	-$6.5	$26.8	**CY**	1.2	
35	MSB	Mesoblast	$2.4	-$86.2	$124.0	A	1.1	Received $58.5 M for Celgene option
36	GID	GI Dynamics	$0.6	-$13.7	$52.0	**CY**	1.1	
37	IIL	Innate Immunotherapeutics	$0.0	-$4.0	$4.1	**CYM**	1.0	
38	DVL	Dorsavi	$0.8	-$5.8	$7.9	A	1.0	
39	RHS	Reproductive Heath Science	$0.0	-$0.3	$1.4	**CY**	1.0	
40	MLA	Medical Australia	$11.3	-$1.6	$1.9	A	**0.9**	
41	TIS	Tissue Therapies	$0.0	-$6.6	$8.1	A	**0.9**	CEO resigned April 7
42	RGS	Regeneus	$1.7	-$4.0	$4.9	A	**0.9**	
43	AVH	Avita Medical	$2.0	-$3.8	$4.4	A	**0.9**	CE Mark for Expanded Recell device
44	MGZ	Medigard	$0.0	-$0.2	$0.2	A	**0.8**	
45	UNS	Unilife	$22.4	-$48.3	$51.0	A	**0.8**	
46	ANP	Antisense Therap.	$0.0	-$1.5	$1.5	A	**0.7**	
47	AHZ	Admedus	$6.5	-$15.7	$15.4	A	**0.7**	Completed $16 M rights issue
48	AVX	Avexa	$0.0	-$1.6	$1.5	A	**0.7**	
49	RNO	Rhinomed	$0.3	-$3.0	$2.8	A	**0.7**	
50	CDY	Cellmid	$1.0	-$1.9	$1.7	A	**0.7**	
51	SUD	SUDA	$5.0	-$2.6	$2.2	A	**0.6**	Completed $5.3 M capital raising
52	ISN	Isonea	$0.0	-$5.1	$4.1	A	**0.6**	
53	PTX	Prescient Therapeutics	$0.0	-$2.0	$1.5	A	**0.6**	
54	MEB	Medibio	$0.0	-$1.7	$1.3	A	**0.6**	Completed $2.6 M capital raising
55	BIT	Biotron	$0.0	-$3.2	$2.2	A	**0.5**	
56	SVA	Simavita	$0.0	-$6.1	$4.2	A	**0.5**	Completed $8.3 M private placement
57	LBT	LBT Innovations	$0.0	-$2.0	$1.3	A	**0.5**	Received US$150 K royalties from Biomerieux
58	UCM	USCOM	$1.0	-$0.9	$0.6	A	**0.5**	Received $330 K R&D tax refund
59	ALT	Analytica	$0.0	-$3.2	$2.0	A	**0.5**	May access loan funding for pot. R&D tax refund
60	SIE	Scigen	$7.1	-$0.9	$2.8	**CY**	**0.3**	
61	QRX	QRxPharma	$0.0	-$7.5	$3.4	A	**0.3**	In a wind-down phase
62	ACW	Actinogen	$0.0	-$2.0	$0.8	A	**0.3**	Completed $10 M capital raising
63	BCT	Bluechiip	$0.1	-$1.7	$0.4	A	**0.2**	Completed $1 M capital raising
64	IVX	Invion	$0.0	-$6.0	$0.7	A	**0.1**	Completed $6.3 M capital raising

Bioshares Model Portfolio (1 May 2015)

Company	Price (current)	Price added to portfolio	Date added
Clinuvel Pharmaceuticals	$2.90	$4.15	December 14
Innate Immunotherapeutics	$0.195	$0.190	November 14
Circadian Technologies	$0.155	$0.160	November 14
Actinogen	$0.098	$0.050	September 14
pSivida	$5.150	$3.800	May 14
Impedimed	$0.875	$0.245	December 13
IDT Australia	$0.290	$0.260	August 13
Viralytics	$0.445	$0.300	August 13
Tissue Therapies	$0.094	$0.255	March 2013
Somnomed	$2.52	$0.94	January 2011
Cogstate	$0.240	$0.13	November 2007

Portfolio Changes – 1 May 2015

IN:
No changes

OUT:
LBT Innovations and Analytica have been removed because cash resources were low, as of March 31, 2015. Each recorded an SI of 0.5 for the March quarter.

Bioshares recommendations: LBT Innovations – **Sell**; Analytica – **Sell**

Cash Balances – Commentary

An analysis of the March quarter 2015 cash balances showed that 25 from 64 life science companies reporting quarterly cash flows scored a Survival Index measure of less than 1. This means they had less than one year's worth of cash available to support activities based on previous spending and revenue patterns.

However, seven of the 25 companies raised capital after the close of the quarter, with Invion raising $6.3 million, Bluechiip $1 million, Actinogen $10 million, Simavita $8.3 million, Medibio $2.6 million, SUDA $5.3 million and Admedus $16 million through a rights issue (which came on the back of a $12 million placement during the March quarter.)

Two companies with Survival Indices of 0.5 are LBT Innovations and Analytica. LBT Innovations has since the end of the quarter received US$150,000 in royalties from its partner Biomerieux (with a total of $600,000 anticipated for 2015). Analytica may access loan facilities tied to a potential R&D tax refund as well as access a $400,000 line of credit it has in place. Both companies are probable candidates for capital raisings in the near future.

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 net operational cash flows (NOCF) for the nine months ending March 31, 2015, annualised, into each company's cash assets as recorded at March 31. For companies that report on December 31 full year basis, the index is based on the average of last five quarters NOCF, divided into each company's cash assets as recorded at March 31, 2015. The NOCF is 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: Acrux, Allegra Orthopeadics, Immuron, Cogstate, Circadian Technologies, Clovercorp, Compumedics,Cryosite, Cyclopharm, Ellex Medical Lasers, IDT, ITL Corp, Polynovo, Medical Developments Int., Novogen, Optiscan Imaging, Progen Pharm., Phosphagenics and Atcor Medical.

pSivida, a re-domiciled company, does not comply with the 4B Rule.

Other stocks not included are Phytotech Medical, which listed during the quarter, Narhex Life Sciences (acquiring ResApp) and Safety Medical which is in a process of re-complying.

Legend for table on previous page:
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: Cash receipts are for the latest nine months. The SI calculation for these companies is based on the latest nine months of NOCF, annualised. **CY**: Cash receipts are for the latest quarter. The SI calculation for these companies is calculated on the average of the last five quarters NOCF, annualised. **CYM**: Cash receipts are for the latest year. SI is calculated on the latest year's NOCF.

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

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