In this edition...

Pharmaxis received a unanimous rebuttal by an advisory panel formed by the FDA to examine its new drug application for Bronchitol for cystic fibrosis. An issue was the purported efficacy of Bronchitol from the first Phase III trial (CF301), with the FDA's analysis based on an Intent to Treat (ITT) population, which showed that Bronchitol was no better than the control arm. In contrast, Pharmaxis used a modified ITT population, ignoring many subjects that dropped out of the trial, to prove efficacy. The FDA did not agree with Pharmaxis' approach and was critical of its methodology.

Quarterly sales reports have revealed the positive impact of a destocking effect at Nanosonics and the beneifits of three acquisistions in Europe for Somnomed. **Companies Covered: NAN, PXS, SOM, Cash Flow 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 - current)	-3.3%
Cumulative Gain	234%
Av. annual gain (11 yrs)	17.8%

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 - Editor Ph: (03) 9326 5382 Email: blake@bioshares.com.au Mark Pachacz - Research Principal Ph:(03) 9348 9317 Email: pachacz@bioshares.com.au

Individual Subscriptions (48 issues/year) \$400 (Inc.GST) Edition Number 489 (1 February 2013)

Copyright 2012 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

1 February 2013 Edition 489

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

Pharmaxis – FDA Panel Rebuff Means Further CF Trial Likely for Bronchitol in US

Pharmaxis (PXS: \$0.715) had its drug application for Bronchitol for the treatment of cystic fibrosis (CF) reviewed by an FDA drug advisory committee. All 14 members of the committee voted against recommending the drug for approval. Some panel members indicated if they were voting for approval in adults only then their decision may have been different.

FDA Issues with the Bronchitol New Drug Application

Prior to the advisory committee meeting the FDA released a Statistical Review document for the advisory panel. That document detailed some major concerns about the new drug application, with a negative panel decision a more than likely outcome.

There were two core issues the FDA has with Pharmaxis drug submission. The first was the exclusion of patients in the efficacy calculations who discontinued treatment within the first six weeks. The second was the rate of hemoptysis (coughing up of blood), in particular the higher rate in children than the control arm.

Treatment of Early Drop Outs

In the first Phase III study, the drop out rate in patients was very high, with 34% not making it through to the six month point. In the second Phase III study, 15% did not complete six months of treatment.

The issue for the FDA was that in the first trial, 12% of patients did not make it to week six, compared to 5% in the control arm. Pharmaxis wanted to exclude these patients from the efficacy calculations. At a pre-NDA meeting the company was told that "post-hoc analyses are often considered hypothesis generating, and conclusions of such analyses usually require confirmation in a subsequent study." So it's unlikely the FDA will accept this approach in its final decision and this is certainly the tone in the FDA briefing document and that reflected in the decision from the advisory panel.

Excluding the early drop outs, statistical significance was achieved in the first study in the primary measure of lung function, but not if the early drops were counted as failed treatments. In the second Phase III study, statistical significance was achieved when including the early drop outs. The drop out rate was much lower in the second Phase III study.

High Hemoptysis Rate

Hemoptysis is physiological event that occurs in people with cystic fibrosis. In these Phase III trials, people with a recent history of a major hemoptysis episode were excluded from the trial. People who could not tolerate Bronchitol were also screened out of the trials. A safety concern around hemoptysis was raised by the FDA and the advisory committee.

Cont'd over

There was little difference in the number of episodes of hemoptysis in adults in the safety study, with 10.6% reporting hemoptysis in the Bronchitol treatment arm, and 8.2% in the control arm (where patients received a low dose of Bronchitol).

However, the concern was in children, where 4% in the six to 11 years age group reported hemoptysis compared to none in the control group. And in those aged 12-17, 9.1% reported hemoptysis versus 3.1% in the control group.

The FDA had previously noted that normally new drugs are tested in an adult population first before moving into children. The FDA also made the point in 2007 that justification of the same dose in adults and children would need to be provided.

Comments/Analysis

The approach taken by Pharmaxis, in excluding those patients who discontinue treatment early (in the first six weeks), is understandable on one level. Bronchitol is being commercialised as a chronic therapy, not an acute therapy. Of the 30,000 people in the US with CF, physicians would be likely to quickly work out whether a CF patient could sustain therapy or not. So in working out whether this therapy is efficacious as a chronic therapy, not acute, those who can not tolerate the drug in the first six weeks arguably could be excluded.

However, the FDA made it clear that changing the goal posts once the results are in is not viewed favourably, and most drug developers would be aware of this stance. As a result, the view taken by the FDA, as detailed in the briefing document, should not have been unexpected. The requirement for an additional trial is now probable.

If Pharmaxis is required to conduct an additional trial in the US, our view is that the first additional trial will be in adults, given both the FDA and the EMA (European regulator) have taken the approach of analysing these two treatment groups (adults and children) separately.

Pharmaxis has learnt a lot from conducting two Phase III trials. The second Phase III trial had a much lower drop out rate than the first trial. It also has a better grasp about recruitment, and when baseline values should be taken for trial participants.

The issue of hemoptysis, where patients cough up blood, became important for the FDA panellists. Pharmaxis needs to provide a deeper understanding of this issue, including how common hemoptysis is in general in people with CF, how serious an issue is the bleeding, how 'temporary' it is, and if it in fact is a sign of efficacy in that the lungs are being cleared through the use the Bronchitol.

Given the concern about hemoptysis in children, another issue potentially for the company to explore is the dose and whether the same dose in adults is optimal for younger patients.

Pharmaxis Accesses \$40 Million in Funding

After the advisory panel decision was given, Pharmaxis announced it had accessed funding of \$40 million. The funding will come from NovaQuest Pharma Opportunities Fund III.

This is an unusual funding agreement for an Australian biotech company. NovaQuest will invest US\$20 million in Pharmaxis in the next 30 days, and a further \$20 million may be invested at Pharmaxis' option by the end of January 2014, based on the company achieving set regulatory and commercial milestones.

Rather than receiving equity in Pharmaxis as consideration, NovaQuest will receive a royalty from sales in Europe for eight years and for seven years from launch in the US. The royalty rate will be low single to low double digit royalty rates, depending on the funds invested and on Bronchitol sales

The funding achieves two things for Pharmaxis. Firstly it provides funding for a likely additional CF trial or trials in the US. The funding also serves as protection from an unsolicited takeover of the business with commercial returns from the Bronchitol asset now to be shared with NovaQuest.

Summary

In the event of a rejection from by the FDA on March 18, 2013, for Pharmaxis' new drug application for Bronchitol, which we consider to be highly likely, there will be a number of issues for Pharmaxis to address before it will be able to bring its drug onto the market in the US.

It will likely need to conduct an additional trial, starting probably in adults, and then exploring use of the drug in a second trial in people less than 18 years of age. The dosage in children may also need to be reviewed, in light of the higher rate of hemoptysis over the control arm. If additional trials are required, we expect this will defer market approval in the US by at least two and a half years.

The ability of patients to tolerate this drug has also shown to be an issue, which will impact on compliance and market adoption of the drug. The company will also need to provide a deeper understanding on the degree of hemoptysis in patients taking the drug.

Funding is not an issue for the medium term, with Pharmaxis maintaining access to around \$100 million (the company had \$65 million in funds at the end of December).

Bronchitol has now emerged as a drug (or drug candidate) with limitations and the commercial prospects for Bronchitol in the CF indication have been diminished as well as in all probability considerably delayed in the US. Convincing arguments in favour of holding the stock at current price levels have evaporated with uncertainy prevailing over the timing of future re-entry.

Pharmaxis is capitalised at \$221 million.

Bioshares recommendation: Sell

Bioshares

Somnomed Posts Solid Topline Growth in December Quarter

Somnomed (SOM: \$0.43) has delivered a solid headline result for the quarter ending December 31, 2012. Unit sales of the company's sleep treatment devices increased by 16% over the previous corresponding period (pcp), to 8,950. Revenue growth was higher, at 34% over the pcp, with the latest quarter sales of \$4.85 million.

The reason why sales growth exceeded MAS (mandibular advancement splint) device sales was because of the acquisition of its distributor in Holland in January 2012, where sales from the distributor were included in the most recent quarter, but device sales to Holland were included both to the distributor in 2011 and direct in 2012.

Mixed Volume Growth Rates

Growth in unit sales in Europe was very good, increasing 26% over the pcp. In Asia, unit sales were reasonable, at 15%. North America, which contributes to around 60% of sales, was a little disappointing, growing at just under 12% by our calculations – disappointing because it is not in the 25%-35% target range that the company is aiming for.

Acquisition of Three European Distributors

The acquisition of three distributors in Europe in 2012 will help drive European sales and help the company secure its dominant position in that fractionated market. The company indicated that in January it started selling Somnomed devices through its recently acquired French distributor. The acquisition of the Dutch distributor a year ago has already had a meaningful contribution to sales. And the Swedish distributor acquisition will also contribute to sustained European growth. The company has more acquisitions it is considering.

The approach the company is taking in Europe is a tried and tested model, where it builds critical mass and local presence through acquisitions of smaller operators.

US Growth Challenges

In the US, the company has some challenges to sustain high growth which it is addressing. The company is in the process of reorganizing its sales and marketing team, which is moving from a dental only sales team to a dental and medical sales team.

The company currently has around eight internal sales staff in the US. Last year it appointed a new head of its North American Operations, Kien Nguyen, who has the task of moving the North American business from moderate growth back to high growth. The company expects recent changes to impact on North American sales from the second half of this financial year.

In the first half of FY2013, the company sold 17,180 devices. It generated a positive cash flow of \$128,000 for the period. The company expects a stronger period in the second half, which generally contributes to around 55% of total sales.

Somnomed is capitalised at \$43 million.

Bioshares recommendation: Speculative Buy Class A

Bioshares

Nanosonics Delivers a Quality Result as Destocking Effect Takes Hold

Nanosonics (NAN: \$0.51) has reported a quality quarterly result. Sales increased by just 16% over the pcp to \$3.2 million. Net cash outflow for the quarter was \$1.85 million, up from a cash spend of \$729,000 in the pcp. So what makes this a good result?

Sales in FY2012 increased to around \$3 million a quarter. However this was assisted by inventory stocking orders from Nanosonics' partner GE Healthcare. In the first quarter of this financial year sales fell to only \$1.2 million with GE making its way through its inventory built up in the previous four quarters. The latest December quarter result is the first indication of accelerated market demand in the US outside of initial stocking orders from GE.

Comparison with Somnomed

Comparing Nanosonics with Somnomed is worthwhile. Both companies increased sales by the same amount in the December quarter, although Somnomed's sales (\$4.85 million) exceed those from Nanosonics. Nanosonics has a market value two times higher that Somnomed at \$133 million. But the reason for that is Nanosonics' higher quality of sales.

By quality of sale, we refer to the threat from competition, both current and future, the requirements for customers to use products, and the repeat and compounding sales. Nanosonics is seeking to make the Trophon system the gold standard globally for disinfection of ultrasound probes. It replaces unsafe chemical methods and has already become the gold standard of disinfection of probes in some regions including Australia. In Australia and New Zealand there are around 700 installed systems, representing around 30% market penetration. There is currently little threat to new competition (for Trophon) and flaws with existing alternatives.

Driver – Mandated Use

One of the major drivers to this technology is mandating use of the product by healthcare authorities. In Australia in some areas this is already the case, where healthcare practitioners are required to use the company's Trophon device to disinfect intra-cavity probes between use in patients.

The third reason for high quality of earnings is the business model for Nanosonics. The company sells the Trophon system, sells for around \$5,000 to distributors. But it also sells consumables, including the hydrogen peroxide canisters, that can only be bought from Nanosonics. Consumable sales are currently around 50% of total sales. This model will see a compounding effect, where the more Trophon units it sells, the higher the total consumable sales will be.

Cont'd on page 5

4.7B Reporting Companies – Cash Balances December 31, 2012 Sorted by Survival Index

Code	Company	Cash Receipts (\$M)	Nett Op. Cash Fl. (\$M)	Cash End 31/12/12 (\$M)		Survival Index	Comments/Events post reporting date
ACG	Atcor Medical	\$4.25	\$1.10	\$2.14	A	Not App	
ACW	ů.	\$0.00	\$0.05	\$0.30	Α	Not App	Received tax refund during quarter of \$290K
HCT	Holista Colltech	\$3.08	\$0.38	\$1.26	Α	Not App	
SOM		\$8.90	\$0.13	\$3.54	A	Not App	
SIE	Scigen	\$17.61	\$0.48	\$1.73	CY	Not App	
UBI	Universal Biosensors	\$30.25	-\$3.30	\$23.65	CY	7.2	
AVX NDL	Avexa	\$0.00 \$0.00	-\$0.88 -\$0.18	\$11.88 \$2.26	A	6.8	
NEU	NeuroDiscovery Neuren Pharmaceuticals	\$0.00	-\$0.18	\$2.26 \$8.64	A CY	6.3 5.8	
CDY	Cellmid	\$0.00	-\$1.50	\$0.64 \$1.78	A	4.2	
RHT	Resonance Health	\$0.29	-\$0.21	\$1.03	A	3.8	
NAN	Nanosonics	\$5.36	-\$3.53	\$25.77	A	3.6	
MSB	Mesoblast	\$0.00	-\$25.37	\$178.65	A	3.5	
VLA	Viralytics	\$0.00	-\$1.24	\$8.15	A	3.3	
ADO	Anteo Diagnostics	\$1.23	-\$0.71	\$4.20	Α	2.9	
OSP	Osprey Medical	\$0.00	-\$5.38	\$14.57	CY	2.7	
GID	GI Dynamics	\$0.37	-\$18.65	\$49.43	CY	2.6	
PYC	Phylogica	\$0.15	-\$0.74	\$3.63	Α	2.4	
LBT	LBT Innovations	\$0.00	-\$0.50	\$2.42	Α	2.4	
IVX	Invion	\$0.02	-\$0.75	\$3.43	Α	2.3	(Formerly CBio)
RVA	Reva Medical	\$0.00	-\$17.84	\$37.36	CY	2.1	
PXS	Pharmaxis	\$1.54	-\$15.95	\$64.86	Α	2.0	Signed \$40 funding agreement with Novaquest Pharma Opp. Fund
BIT	Biotron	\$0.00	-\$1.59	\$6.30	Α	2.0	
AVH	Avita Medical	\$1.62	-\$3.65	\$14.39	A	2.0	
PAB	Patrys	\$0.00	-\$1.62	\$6.09	Α	1.9	
CUV	Clinuvel Pharmaceuticals	\$0.86	-\$2.96	\$10.11	A	1.7	
SPL	Starpharma	\$0.32	-\$10.24	\$33.18	A	1.6	
BRC	Brain Resource Corp	\$0.47	-\$1.64	\$5.11	A	1.6	
ANP LCT	Antisense Therap. Living Cell Technologies	\$0.00 \$3.43	-\$1.70 -\$0.82	\$5.10 \$2.35	A	1.5 1.4	
OBJ	OBJ	\$0.04	-\$0.82	\$2.35	A	1.4	
PRR	Prima Biomed	\$0.04	-\$0.94	\$28.07	A	1.4	
QRX	QRxPharma	\$0.00	-\$6.04	\$16.60	A	1.4	
BXN	Bioxyne	\$0.27	-\$0.21	\$0.51	A	1.2	
BDM	Biodiem	\$0.00	-\$0.95	\$2.33	A	1.2	
ACU	Acuvax	\$0.01	-\$0.22	\$0.48	Α	1.1	
IPD	Impedimed	\$1.57	-\$4.72	\$9.65	Α	1.0	
PBT	Prana Biotechnology	\$0.00	-\$4.55	\$8.84	Α	1.0	
GTG	Genetic Technologies	\$5.26	-\$3.13	\$5.94	Α	0.9	
ISN	Isonea	\$0.02	-\$2.13	\$3.80	Α	0.9	
GBI	Genera Biosystems	\$0.03	-\$0.67	\$1.13	Α	0.8	
BCT	Bluechiip	\$0.04	-\$1.03	\$1.61	А	0.8	
SUD	SUDA	\$2.33	-\$0.81	\$1.27	А	0.8	(Formerly Eastland Medical)
MGZ	J.	\$0.00	-\$0.13	\$0.19	Α	0.7	
AHZ	Allied Healthcare Group	\$3.65	-\$1.41	\$1.99	Α	0.7	Completed \$2.9M Share Purchase Plan
BNO	Bionomics	\$1.89	-\$6.87	\$9.25	A	0.7	Anticipates \$4.2M tax refund and US\$2M milestone pmt
	USCOM	\$0.42	-\$0.70	\$0.90	Α	0.6	
IMI	IM Medical	\$0.00	-\$0.29	\$0.33	A	0.6	
ALT	Analytica	\$0.00	-\$0.60	\$0.61	A	0.5	Access to \$400K Line of Credit
ACL	Alchemia	\$1.57	-\$7.71	\$6.25	A	0.4	CEO resigned 25/1/13
BLT CBB	Benitec Cordlife	\$0.28 \$4.15	-\$1.77 -\$1.60	\$1.22 \$1.09	A	0.3	Sold interest in Shandong Cord Blood Bank for US\$8.65M
IMU	Imugene	\$4.15	-\$1.60	\$1.09	A A	0.3 0.3	Solu interest in Shandong Cord Blood Bank for US\$8.65M
MLA	Medical Australia	\$0.00	-\$1.23	\$0.74	A	0.3	
TIS	Tissue Therapies	\$0.00	-\$0.00	\$1.97	A	0.2	
UNS	Unilife	\$0.00	-\$4.24	\$1.97	A	0.2	Activated ATM facility to raise US\$3.85M
CGP	Consegna Group	\$0.00	-\$1.26	\$0.21	A	0.2	Tranche 2 of placement raised \$192K; conducting SPP
AGX	Agenix	\$0.00	-\$0.58	\$0.05	A	0.0	Accessing \$5M funding (Fortrend Securities); \$3M (Baycrest Capital)
BNE	Bone Medical	\$0.00	-\$0.54	\$0.04	A	0.0	US\$6M Convertible note facility with La Jolla Cove Invest. Part.
HTX	Healthlinx	\$0.03	-\$0.63	\$0.04	A	0.0	US\$9M Convertible note facility with La Jolla Cove Invest. Part.
_				•	•		· · · · · · · · · · · · · · · · · · ·

Bioshares Model Portfolio (1 February 2013)					
Company	Price	Price added	Date added		
	(current)	to portfolio			
Psivida	\$1.40	\$1.550	November 2012		
Benitec	\$0.014	\$0.016	November 2012		
Nanosonics	\$0.510	\$0.495	June 2012		
Osprey Medical	\$0.64	\$0.40	April 2012		
QRxPharma	\$1.00	\$1.66	October 2011		
Somnomed	\$1.00	\$0.94	January 2011		
Cogstate	\$0.350	\$0.13	November 2007		
Clinuvel Pharmaceuticals	\$2.41	\$6.60	September 2007		
Universal Biosensors	\$0.88	\$1.23	June 2007		
Alchemia	\$0.320	\$0.67	May 2004		

Portfolio Changes – 1 February 2013

IN:

No changes

OUT: No changes

4.7B Reporting Companies – Cash Balances Dec. 31, 2012 (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 theaverage of the last half-year of NOCF, annualised.

CY: The SI calculation for these companies is calculated on the last year of NOCF.

Commentary

There were 60 ASX listed life science companies for which we tabulated cash flow receipts, net operational cash and for which we calculated Survival Index figures for the December quarter.

There were 22 companies which retained cash resources at December 31, 2012, sufficient to fund less than one year's worth of operational activities (based on previous spending patterns). There were 12 companies with less than six month's cash at hand.

Agenix, Bone Medical and Healthlinx, on the face of it, had the weakest cash positions at December 31, 2012. However, their access to lines of funding that can be accessed periodically, has and will continue to maintain the viability of these companies at a base level.

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 net operational cash flows (NOCF) for the half year ending December 31, 2012, annualised, into each company's cash assets as recorded at December 31, 2012. For companies that report on December 31 full year basis, the index is based on the last year of net operational cash flows (NOCF). 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: Acrux, Advanced Medical Design and Manufact., Immuron, Bioniche, Cogstate, Circadian Technologies, Clovercorp, Compumedics, Cryosite, Cyclopharm, Ellex Medical Lasers, IDT, ITL Corp, Calzada, Medical Developments Int., Novogen, Optiscan Imaging, Progen Pharm. and Phosphagenics Re-domiciled companies, pSivida and Heartware International no longer comply with the 4B Rule, as does Sunshine Heart

- Nanosonics cont'd from page 3

UK Disinfection Processes Under Review

Following the death in 2011 of a patient from an infection contracted from an ultrasound probe, the procedures for disinfection of ultrasound probes in Scotland and Wales are now being reviewed with England also to review ultrasound probe disinfection practices. Every NHS Hospital Trust is currently reviewing its probe disinfection processes according to Nanosonics. These reviews have the potential to have the Trophon product selected as the gold standard for probe disinfection in that region. Another important feature of the Trophon system that other processes do not have is that it facilitates tracking of cleaning processes, which further reduces the risk of cross-contamination between patients.

Nanosonics is capitalised at \$133 million.

Bioshares recommendation: Speculative Buy Class A

 Speculative Buy – Class A The second group are stocks with existing positive cash flows. The second group are pocks without near term positive cash flows. The second group are stocks without near term positive cash flows, history of losses, or at rly stages of commercialisation. In this second group, which are sentially speculative propositions, Bioshares grades them according relative risk within that group, to better reflect the very large pread of risk within those stocks. For both groups, the rating "Take rofits" means that investors may re-weight their holding by selling etween 25%-75% of a stock. Speculative Buy – Class B These stocks will have more than one product or opportunity, and 	w Biosharos Batos Stocks	
<pre>arrangendes. The first group are stocks with existing positive cash so or close to producting positive cash flows, this scould group, which are strained by specialities producting positive cash flows his scould group, which are strained by specialities producting positive cash flows his scould group, which are strained by specialities production positive cash flows his scould group, which are strained by specialities production positive cash flows his scould group, which are strained by specialities product cash flows his scould group, which are strained by specialities product cash flows his scould group, which are strained by specialities product cash flows the the holding by selicit the set which staffing publicle cash flows the close to market. However, they are lifet by the lacks, specialities Big - Class B Thes stocks agenerally have more than one product or opportunity, and seven be close to market. However, they are lifet by the lacks, specialities Big - Class A These stocks agenerally have more than one product or opportunity, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks, and seven be close to market. However, they are lifet by the lacks and seven by a brait stocks. Seven lifet by the lacks and seven by and and seven the close have the seven test by and or seven they and they are seven by and and seven they and they are seven they and they are seven they and they are seven by an and the and they are seven they and they are seven they and they are seven by and they are seven they and they are seven they and they are seven by and they are seven they and they are seven they and</pre>	W DIOSIIAI ES NAIES SIOCKS	Group B
<pre>view or lose to producing positive cash flows, history of togo serve at which are not producing positive cash flows, history of togo serve at matching security propositions. Discharses grades the neurophan first "mans that investors up, to better reflect the very large regular security investors and product on security of the first "mans that investors up, to both graup, to better reflect the very large regular security investors and those sockeds for to the product on gravity of the secure 23%. "Six of a sck.". POP Were able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck. POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sck." POP Were able to be able to the size of a sch able to the size of a sch</pre>		Stocks without near term positive cash flows, history of losses, or a early stages commercialisation
science Specialities Buy-Class A Specialities Buy-Class A Specialities Takes within the second promy, which are entially specialities provide there reflect the very large card of risk within those stocks. For both groups, the rating "Takes stocks with resisting positive cash flows or close to producing positive cash first; "means that investors may reweight their holding by seling ween 25%-75% of a stock. Specialities Buy-Class A Op A CMP is 20% - Fair Value their Stocks - Foir Value by CMP is 20% - Fair Value their CMP is 20% - Class A These stocks are fair their CMP is 20% - Class A Chrometimes in the CMP is 20% - Class A Special CMP is 20% - Class A These stocks are fair to be lack intervent the corner balance their contreal on theintervent their corner balance theintervent the corne b		
<pre>individual speculative propositions, Biosharer grades them accounts, relative risk within those stocks. Nor both groups, the stear grades fusion must that investors may re-weight their holding by selicit were 23%-75% of a stock. Series 24% of a stock. Series 34% of a stock. Series</pre>	cks without near term positive cash flows, history of losses, or at	
<pre>relative risk within that group, to better reflect the very large dor risk within those stocks. Pro tobg groups, the rating "Take file" many that investors may re-weight their holding by selling went 25% - 75% of a stock. oup A went 25% - 75% of a stock. oup A out is 10% - Fair Value control to CMP is 20% > Fair Value the 20% is 20% > Fair Value Thonovations. Mescolast, Tissue Therapies. Virrlytics, Phosphagenics, Immuron, Phylogica, Bluechting, psivida, Antisense erapeutics, Benitice BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invion Thonovations. Busching is a scenario factor and the provide scenario factor an</pre>		
<pre>induction work in the statistic product is accelerate on group in the interpretation of the statistic product or opportunity, and may even be close to market. However, they are likely to be lacking in several key areas. For example, their cache position is weak, or in magement or board may used to close to market. However, they are likely to be lacking in several key areas. For example, their cache position is weak, or in magement or board may used to close to market. However, they are likely to be lacking in several key areas. For example, their cache position is weak, or in magement or board may used to close to market. However, they are likely to be lacking in several key areas. For example, their cache position is weak, or in magement or board may used to close to market. However, they are likely to be lacking in several key areas. For example, their cache position is weak, or in magement or board may used to be product in development and lack may exerce be close to market. However, they are likely to be lacking in several key areas. Speculative Bud - Class A or B or C Set and their key and validation frequents. Biotechnip, pSivida, Antisense erapeutics, Benice BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invion claimer claim</pre>	elative risk within that group, to better reflect the very large	
<pre>weem 25%-75% of a stock. oppA class with existing positive cash flows or close to producing positive cash ws. yraid CMP is 10% < Fair Value Cmmatai CMP is 10% < Fair Value Cmmatai CMP is 10% < Fair Value Cmmatai CMP is 10% > Fair Value CMP is 10% ></pre>		
but y and y	ween 25%-75% of a stock.	
w. CMP is 20% < Fair Value comment of book many need strengthening. Speculative Bity - Class C management of book many need strengthening. Speculative Bity - Class C These stocks generally have one product in development and lack may external validation features. Speculative Bity - Class C These stocks generally have one product in development and lack may external validation features. Speculative Bity - Class A or B or C Set Orporate Subscribers: Pharmaxis, Starpharma Holdings, Cogstate, Bionomics, Biota Holdings, Impedimed, QRxPharma ST Innovations, Mesoholast, Tissue Therapics, Viralytics, Phosphagenics, Immuron, Phylogica, Blueching, Solvida, Antisense tempeutics, Benitec BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invior clanne: many: investment horizon and provide analysis of every material fact respecting any company, industy or security. The optimis and estimate berie negreed and on some of the prior and needs and wide or despecting and March Nathy SP 11d (IMM) and any of their secures. Set on any person in the security in the optimis and estimate berien sequence and wide company include and March Nathy SP 11d (IMM) and any of their secures. Set on any person in the security on the optimis and estimate berien sequence in any tork and the prior and person security on the optimis and estimate berien sequence in this answerther of the period (Copperators Law S4). The persons involved in a responsible for the preparation of the prior data wide and wide set on the particulation and prioritic set on the securities. Detains and the intervention of the prior data wide and wide in the particular person or company in when the two any econs in persons of the prior data and and the prior of the persons involved in a responsible for the preparation of the intervention and persons estimates. Prior Sector Se		may even be close to market. However, they are likely to be lacking
gy CMF is Jobs > Fair Value Speculative Buy > Class C ide Value = CMP These stocks generally have one product in development and lack many external validation features. ide CMP is 10% > Fair Value Speculative Buy > Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C iff = CMP is 20% > Fair Value Speculative Hold - Class A or B or C<	vs.	
old Value = CMP main These stocks generally have one product in development and lack may external validation features. Speculative Hold – Class A or B or C Set MP-Current Market Price) Set Set Set To subscribers: Pharmas, Starpharma Holdings, Cogstate, Bionomics, Biota Holdings, Impedimed, QRxPharma BT Innovations, Mesoblast, Tissue Therapies, Viralytics, Phosphagenics, Immuron, Phylogica, Bluechip, pSivida, Antisense herapeutics, Benitce BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invion celam: ornation in this neveletter is not a complete analysis of every material fact respecting any company, industry or security. The opinions and estimates herein expressed may any of their associates, officer o saif may have the market of bier the price of the price of the proparation and price of the pric of the price of the pr		
genetative Speculative Hold - Class A or B or C MP_Current Market Price) Self orporate Subscribers: Pharmaxis, Starpharma Holdings, Cogstate, Bionomics, Biota Holdings, Impedimed, QRxPharma To novations, Mesoblast, Tissue Therapics, Viralytics, Phosphagenics, Immuron, Phylogica, Bluechip, pSivida, Antisense herapeutics, Benitec BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invion estimate entime: organisation contained in this evolution is not a complex analysis of every material fact respecting any company, industry or security. The options and estimates herein expressed near poly investment opticms, financial status and particle analysis of the MRA) and any of their associal, Biofer and estimates herein expressed is any of motion status and poly in every material fact respecting any company, industry or security. The options and estimates herein expressed meet the current pidework of the particular meets. Accord Malysis Pt Id MRA) and any of their associal, Biofer and estimates herein expressed is any of motion status and price of the particular person or company in workmen been proported to general ciccularianed in this movementation work been provided by Biaket Charasy and Market Analysis Pt Id. The persons involved in or responsible for the particularia the fact meets associal control to material fact respective control. RAR, ADD, COH, CEL, WYN, NAN, PD, PD, PXS, SOM, SPL, K, WB. These interests can change at any time and are not additional resonmendation. Holdings in sucks valued at less than 5100 are not disclosed. Subscription Rates (inc. GST) At sissues per year (electronic distribution): S400 For multiple email distributions within \$630, 2-3 email addresses pricing structure is as follows: S100 6-10 email addresses pricing structure is as follows: S1000 6-10 email address	d Value = CMP	
MP-Current Market Price) Sell orporate Subscribers: Pharmaxis, Starpharma Holdings, Cogstate, Bionomics, Biota Holdings, Impedimed, QRxPharma BT Innovations, Mesoblast, Tissue Therapies, Viralytics, Phosphagenics, Immuron, Phylogica, Bluechip, pSivida, Antisense herapeutics, Benitec BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invion eclaims: moration 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 resem the current judgment of the publisher and are subject to stange. Black Industry and Market Analysis PV Ltd (BMA) and any of them associates, officers or staff may have respective, Entering and contrast is provided in any or them associates, officers or staff may have provided by any ordinate analysis of overy material fact respecting any company, industry or security. The opinions and estimates herein expressed resemble control to publisher and are subject to stimage. Black Industry and Market Analysis PV Ltd (BMA) and any of them associates, officers or staff may have company to vhom they have been information provide line or traponsible for the purchased prove and publication of their port before the market endities and there is should by one my resummation of their port before the market analysis of exeruits exacts. ACR: ADO, COH, CSL, NYX, NAX, PNYP, NYX, PXX, PNY, SVX, PNY, PNY, PNY, SVX, SVX, PNY, PNY, PNY, SVX, SVX, PNY, PNY, PNY, SVX, SVX, PNY, PNY, PNY, SV		-
BT Innovations, Mesoblast, Tissue Therapies, Viralytics, Phosphagenics, Immuron, Phylogica, Bluechiip, pSivida, Antisense herapeutics, Benitec BioPharma, Allied Healthcare Group, Calzada, Bioniche, Atcor Medical, Invion elaime montheration contained in this newsletter is not a complete analysis of every material fact respecting any company. Industry or security. The opinions and estimates herein expresses means the careful adaptment of the publisher and are subject to change. Black Industry and Marei Analysis Py Lid (BIMA) and any of their associates, offerers or suff may hive means the careful adaptment of the publisher and are subject to change. Black Industry and Marei Analysis Py Lid (BIMA) and any of their associates due on publication of their ones independent equiptics. Details means without consulting their investment adviser (Compenditon. Law SAP). The provision type of their ones independent equiptics. Details means without consulting their investment adviser (Compenditon. Law SAP). The provision type of the provide the provise of the provise of the provise of the associates declare interests in the following ASN Helathcare and Biotechnology sector securities. ACL, ACR, ADO, COIL CSL, MYX, NAN, PDY, PXS, SOM SPE, S, UBI. These interests can change at any time and are not additional recommendations. Holdings in stocks valued at less than \$100 are not disclosed. Minute interests can change at any time and are not additional recommendations. Holdings in stocks valued at less than \$100 are not disclosed. Minute interests can change at any time and are not additional recommendations. Holdings in stocks valued at less than \$100 are not disclosed. Minute interests can change at any time and are not additional recommendations. Holdings in stocks valued at less than \$100 are not disclosed. Minute interests can change at any time and are not additional recommendations. Holdings in stocks valued at less than \$100 are not disclosed. Minute interests in the following ASP Helathcare and Biotechnology sector		Sell
<pre>manuto in this nevoletter is not a complete analysis of every material fast respecting any company: industry metanions and estimates berein expressed network is necessarily to berein. (Corporations Law s.89). Details contained herein have been prepared for general cinculation and do not have regard to any preson's of union objectives, financial situation and particular needs. Accordingly, on responsible for the proparation and estimates berein expressed into the train socurate but no varianty of according set on responsible for the proparation and publication of this report believe the intervent have been issued on the basis they are only for the particular person or company to whom they have been provided by Bale Industry and Market Analysis (CAC, RAD, OC, ICH, SLAY, NAN, IPD, PXS, SOM, SPL, UP, Thee interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed. We are not able to be fastis of particular person or company to whom they have been provided by Bale Industry and Market Analysis (CAC, RAD, OC, ICH, SLAY, NAN, IPD, PXS, SOM, SPL, UP, Thee interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed. The set interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed. The set interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed. The set interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed. The set interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed. The set interests can change at any time and are not additional recommendations. Holdings is stocks valued at less than S100 are not disclosed.</pre>		
48 issues per year (electronic distribution): \$400 For multiple email distributions within \$630 2-3 email addresses the same business cost centre, our \$855 4-5 email addresses pricing structure is as follows: \$1090 6-10 email addresses To subscribe, post/fax this subscription form to: Bioshares PO Box 193 Richmond VIC 3121 Fax: +613 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	pany's investment objectives, financial situation and particular needs. Accordingly, no rec iment without consulting their investment adviser (Corporations Law s.851). The person mation herein is accurate but no warranty of accuracy is given and persons seeking to re ained herein have been issued on the basis they are only for the particular person or compa ctors and/or associates declare interests in the following ASX Healthcare and Biotechnolo	ipients should rely on any recommendation (whether express or implied) contained in this s involved in or responsible for the preparation and publication of this report believe the sly on information provided herein should make their own independent enquiries. Details ny to whom they have been provided by Blake Industry and Market Analysis Pty Ltd. The sy sector securities: ACL, ACR, ADO, COH, CSL, MYX, NAN, IPD, PXS, SOM, SPL,
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	48 issues per year (elect	ronic distribution): \$400
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 Subscriber details Name Organisation Ph ()		\$855 4-5 email addresses
I enclose a cheque for \$ made payable to Blake Industry & Market Analysis Pty Ltd, or Please charge my credit card \$ MasterCard Visa	pricing structure is as follows:	\$855 4-5 email addresses \$1090 6-10 email addresses
Please charge my credit card \$ MasterCard Visa Card Number	pricing structure is as follows: To subscribe, post/fax this subscription form to:	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares
Card Number Signature Subscriber details Name Organisation Ph ()	pricing structure is as follows: To subscribe, post/fax this subscription form to:	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350
Signature Subscriber details Name Organisation Ph ()	pricing structure is as follows: To subscribe, post/fax this subscription form to:	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350
Subscriber details Name Organisation Ph ()	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I	 \$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or
Name	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master	 \$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or
Organisation Ph ()	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State
Ph ()	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number Signature	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State
	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number Signature Subscriber details	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State
Emails	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number Signature Subscriber details Name	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State
	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number Signature Subscriber details Name Organisation	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State
	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number Signature Subscriber details Name Organisation Ph ()	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State
	pricing structure is as follows: To subscribe, post/fax this subscription form to: I enclose a cheque for \$ made payable to I Please charge my credit card \$ Master Card Number Signature Subscriber details Name Organisation Ph ()	\$855 4-5 email addresses \$1090 6-10 email addresses Bioshares PO Box 193 Richmond VIC 3121 Fax: +61 3 9329 3350 Blake Industry & Market Analysis Pty Ltd, or Card Visa Image: State