### In this edition...

The tactics used by generic drug companies in the US are not easy to understand, especially when more than one dose form of a drug exists. Warner Chilcott, for which Mayne Pharma manufactures the antibiotic Doryx, ran down stocks of its 150mg product, hoping to replace it in the market with a 200mg version, when the 150mg becomes open to generic competition next month. However, the FDA didn't approve the 200mg Doryx, which indirectly has put a dent in Mayne's earnings. While investors have been distracted by this issue, we suggest more attention should be placed on Mayne's antifungal product, the SUBACAP asset, which we have valued at \$97 million

#### The Editors

Companies Covered: MYX, PVA, Sales and Profits Review

	<b>Bioshares</b> 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	-21.3%
Cumulative Gain	231%
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) \$375 (Inc.GST) Edition Number 425 (16 September 2011) ISSN 1443-850X

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# Bioshares

### 16 September 2011 Edition 425

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

### Mayne Pharma Group – All Eyes on Doryx But SUBACAP Asset Being Missed

Mayne Pharma Group (MYX: 43.5 cents) presents an investment opportunity for investors. A temporary drop in sales of its lead product, Doryx, which is manufactured for **Warner Chilcott** in the US, has caused a lower than expected revenue and net profit result for FY2011. This combined with the company's SUBACAP drug in final stages of development, which is not being recognised by the market, makes Mayne Pharma an attractive investment at current prices.

Mayne is capitalised at \$70 million and is down 56% from its 12 month high. In FY2011, it generated total revenue of \$50.1 million, with a net profit of only \$1.7 million. (In FY2010, the company generated revenue of \$37 million with a net profit of \$3.3 million, however this only accounted for eight months of the pharmaceutical business operation, which was acquired during that year.) Doryx revenue fell 46% to \$21 million, now representing 42% of total revenue. And the appreciating Australian dollar, which was trading at US\$0.85 at 30 June last year, has had a negative \$3 million impact on the net result.

### **Temporary Doryx Issue**

Doryx is a tetracycline class of antibiotic, used to treat a range infections and severe acne. It was developed by Mayne Pharma and was licensed to Warner Chilcott. In 2010 Warner Chilcott generated sales of US\$172 million, down from \$210 million in the previous year. This fall has been due to changes in Warner Chilcott's loyalty card program which has resulted in lower prescription volumes.

The Doryx product positioning can be difficult to understand, but here is the explanation. Warner Chilcott started selling Doryx as a 75mg and then a 100mg dose. It then introduced a 150mg dose, removing most of the lower doses from the market, with the higher dose having benefits over the smaller doses. This is the start of the generic drug game. The 150mg dose accounted for 95% of Doryx sales in 2010.

Generic competitors play catch up with the original or branded drug, in this case Doryx. The FDA has approved generic versions of smaller doses from Impax and Mylan in December last year. Warner Chilcott believes these products were launched 'at risk' in January this year. Warner Chilcott and Mayne have filed infringement lawsuits against two companies.

There is an outstanding Mayne patent over the Doryx product that extends out to 2022. With respect to the 150mg dose, the FDA has granted what's called a 30 month stay (ending 30 September 2011) for the disputing companies to settle the patent issue, after which the FDA can approve these generics. This stay was granted over the 150mg dose because Warner Chilcott had submitted Mayne's 2022 Doryx patent to be listed in the FDA's Orange book before the generics had filed their 150mg ANDAs (abbreviated new drug applications) with the FDA, but not before the smaller dose Doryx ANDAs were filed.

Generic companies have a number of options: they can either launch their FDA approved 150mg generic Doryx product in what is called 'at risk', once approved, after 30 September; settle with Warner Chilcott to bring out their 150mg dose earlier than 2022 without risking a legal dispute and harsh penalties; or wait until 2022.

To date, two generics companies, Heritage Pharmaceuticals and Actavis, have settled with Warner Chilcott allowing them to market their generic 150mg doses from the end of 2016, five years earlier than the patent expiry. Other generic companies that may launch their product 'at risk' are Impax, Mylan and Sandoz.

But it becomes a poker game for these pharmaceutical companies. Warner Chilcott was hoping to get its 200mg dose approved by the FDA before 1 October (when the stay expires) but was unsuccessful. It can either argue the point with the FDA or conduct additional trials, which may take around six months. It's unclear which path it will take.

The issue for Warner Chilcott is that if it has not switched its customers from the 150mg dose to the 200mg dose by October 1, then Mylan and Impax can launch at risk in October. If the 200mg dose is approved prior to that date, then it makes it more difficult for the generic competitors to compete with their 150mg doses.

Mylan has received tentative approval from the FDA, and Impax has not, so Mylan should get a 180 day exclusivity as the only generic, if it launches at risk.

The issue with launching products at risk, which would likely result in a formal patent dispute, which is the case here, is that severe penalties apply for the infringing generic company if they lose. So many generics companies are not comfortable launching at risk.

Rather than have an oversupply of the 150mg dose, Warner Chilcott ran down supply levels assuming its 200mg dose would be approved. This contributed to the 46% drop in manufacturing orders to Mayne Pharma, together will a fall in sales due to loyalty card changes from Warner Chilcott and the unfavourable exchange rate movements for Mayne.

Warner Chilcott has now resumed ordering the 150mg doses of Doryx, which should see Doryx sales improve, if a generic competitor does not launch at risk, however profitability will continue to be affected by the high Australian dollar.

### And There's More...

At the time of writing, it was announced that Warner Chilcott received approval from the FDA for a 'Dual-Scored' 150mg tablet. The generic competitors may need to have both a single and dual scored version available, so they may need to file a dual scored version for approval before their single scored versions can be approved. A second score means that the tablet can be broken into three parts, not two. However due to recent healthcare changes in the US, it's unclear how much this will delay competitors.

# SUBACAP - Significant Value Has Been Created and Ready to be Realised

Mayne Pharma has developed what should be a valuable product in SUBACAP. SUBACAP is an improved version of the antifungal drug, itraconazole. SUBACAP delivers improved bioavailability, requiring only a half dose to the lead itraconazole product on the market, called Sporanox, and delivers a more consistent absorption profile across patients.

SUBACAP has been filed for approval in Europe by Mayne Pharma, as a half dose version with non-inferiority in safety and efficacy over incumbent products.

Mayne has spent around \$25 million developing SUBACAP, which should be a valuable asset. Over the last two years it has spent \$11 million on R&D. Its options are either to license the drug or sell it outright. The company is currently looking to find a group to market the drug, and this would likely deliver more value to Mayne once European approval has been granted.

According to Mayne management, there is substantial interest in this product. The global itraconazole market is valued around US\$550 million a year.

There is further potential upside for SUBACAP. Its lower effective dose and thereby implied better safety profile could see a future licensor take market share away from other antifungal markets. Sporanox has a black box warning from the FDA and this no doubt limits its sales. The FDA believes there is a 'small but real risk' of developing congestive heart failure from Sporanox use and it 'has been associated with serious liver problems resulting in liver failure and death', according to the FDA.

Sporanox has poor bioavailability and this is one of the core issues that SUBACAP addresses. That SUBACAP has been shown to be as effective at half the dose should see a place for it in the market with its implied better safety profile. That should translate to interest from potential licensors and also from regulators in allowing this drug onto the market.

The global annual antifungal market is worth US\$4.9 billion. One of the appeals of itraconazole (the active pharmaceutical ingredient in SUBACAP and Sporanox) is that it is one of the broadest acting antifungals on the market. This could see SUBACAP expand the itraconzole market share in the antifungal drug space.

In December last year Mayne filed SUBACAP for approval in Europe. The company is aiming for regulatory approval by mid 2012 with a licensing deal as well, which we would expect would follow approval. A Phase III study for SUBACAP in the US will be required, which could involve 600 patients, and take around 18 months to complete. It's unclear as to when this will start, with Mayne due to meet with the FDA by year's end for a Pre-Phase III meeting. We would not be surprised if a future licensing partner assumes responsibility for this trial. The trial is scheduled to be completed by the end of FY2013.

Cont'd over

### Astrix and other business

Mayne sells two versions of a low dose 100mg aspirin, called Astrix. One is a more standard aspiring product, but the second is a high-tech aspirin. It is capsule with enteric coated pellets that delay absorption until the pellets reach the small intestine. With standard aspirin, there is a risk that long term use can cause gastric ulceration and bleeding, particularly if a large aspirin fragment adheres to the stomach lining. Mayne's is the only type of enteric coated pelletised aspirin on the market, and presumably is designed for safe chronic use to prevent clotting related illnesses such as stroke and heart attack.

The Astrix products are sold in Australia, Hong Kong, Sri Lanka, Mauritius and with the second largest market after Australia being South Korea. Astrix related revenue make up 16% of the company's revenue now, with sales increasing by 27% in FY2011. Mayne manufactures the Doryx (doxycycline), Astrix (aspirin), and Eryc/Erymax (erythromycin) products for licensors and it sells locally its own brand of these products. It also makes, under contract, the products Kadian, Magnoplasm and Urocard, and has capacity to increase its contract manufacturing services at its current facility.

Overall, Mayne's other businesses outside of Doryx manufacturing, delivered a very strong result, increasing by 18% in FY2011. Aside from the temporary drop in Doryx orders, the Mayne business looks to be in very good shape.

### Valuation - \$1.04 per share

Using a probability adjusted discounted cash flow analysis, we estimate a fair value for the company's underlying business of 42 cents per share, excluding the value of the SUBACAP asset. We assign a current value to the SUBACAP asset of \$97 million. This assumes the drug is licensed to a third party, no upfront payments or milestones, sales starting in FY2013 at \$50 million, and peaking in 2017 at \$250 million. We arrive at an overall value of Mayne Pharma of \$162 million, or \$1.04 per share

### Summary

Mayne Pharma is a diverse pharmaceutical business that generates annual revenue of around \$50 million a year. Whilst there is still a high reliance on a particular revenue stream, that of the Doryx product manufactured for Warner Chilcott, which makes up 42% of sales, the company is building its existing business, with an 18% growth in sales in the last financial year excluding Doryx.

There is much attention of the Doryx product and the circling of generic competitors. The shares are currently trading on the value of the underlying business, however assigning none of the considerable value the SUBACAP asset holds, which we value at \$97 million alone.

#### Bioshares recommendation: Buy

We have added Mayne Pharma to the Bioshares Model Portfolio.

**Bioshares** 

# How to turn your Nobel prizeworthy idea into a blockbuster medical product while keeping your investors happy and still finding time for golf.

Join other scientists at the MBA in a Day - Business basics for bioscientists **Ausbiotech BioPro** course in Adelaide on Sunday October 16 just before the Ausbiotech national conference.

OK, given it takes more than 7 years (world's best practice) and a hundred million plus to get there, you might not have much time for golf. But we've assembled 5 expert speakers to save you time, money and anguish along the yellow brick path to commercialising bioscience innovations.

Are you a scientist who's spending less time in the lab and more time pondering how to turn IP into income?

Do you have staff who need a better grip on how to commercialise your organisation's inventions?

Do you want to understand how to build a business based on science?

Are you considering a career move from pure lab work into business development?

Then this jam-packed day has been designed for you. It's like an MBA Executive Summary for life scientists. In the morning these topics are covered:

- What is a company, how do you set one up and who controls it?
- How do you account for what happens to the money.
- Where do shareholders, directors, managers, inventors and customers fit in the pecking order?
- What are investors looking for besides a return on their investment?
- How do you write an effective Business Plan?
- How do you protect your IP, value your innovations, raise money •and negotiate deals with pharma that work?

In the afternoon, the theory is put it into virtual practice with a Case Study that ties many of the points into a real example. Then participants are asked to put themselves in the shoes of the management and directors, by making critical choices and decisions at key turning points in the life of a company going through 4 stages of growth.

Speakers include Business **Professor Mike Vitale**, ex biotech CEOs **Tom Williams** and **Dr Ian Nisbet**, Corporate lawyer **Jason Watson** and Patent attorney **Stuart Boyer**. Produced by BioMentoring Australia for Ausbiotech.

Over 100 previous participants have found the day extremely worthwhile. Book via Ausbiotech at: http://ausbiotech2011.com.au/ ProfessionalDevelopment

# Results Summary June 30 Reporting Companies – FY2011

		<b>a</b> ( <b>a</b> )	. <u>.</u> .	<b>y</b> 1				-	, pai		0044	1			
Company	Code	Cap (\$M)	Price 16/09/11		2010 Revenues	2011 Revenues	2010 Sales (\$M)	2011 Sales (\$M)	%ch.	2010 Profit/Loss	2011 Profit/Loss	%ch.	Р	PE	P/S
			10/03/11		(\$M)	(\$M)	Sales (pivi)	Sales (\$WI)	/0CII.	(\$M)	(\$M)	/ <b>%</b> CII.	<sup>-</sup>	FE	F/3
	0.011	<b>0</b> 0.005		1			<b>A</b> 704.00	<b>*</b> ***	100/			4.00/		40	
Cochlear CSL	COH CSL	\$2,905 \$14,197	\$51.20 \$27.05		\$744.41 \$4,626.94	\$817.55 \$4,321.57	\$734.80 \$4,455.82	\$809.65 \$4,187.55	10% -6%	\$155.15 \$1,052.90	\$180.11 \$940.60	16% -11%	P P	16 15	3.6 3.4
Resmed Inc.	RMD	\$4,327		1154	\$4,626.94	\$4,321.37	\$4,455.82	\$1,243.15	-0%	\$1,052.90	\$940.80	15%	P	19	3.4
Resilieu liic.		ψ4,327	ψ2.00	004	ψ1,112.05	ψ1,279.90	ψ1,032.30	ψ1,240.10	1470	ψ130.03	ΨΖΖΟ.33	1370	•	13	5.5
Atcor Medical	ACG	\$10	\$0.08		\$9.25	\$7.48	\$9.20	\$7.46	-19%	-\$1.22	-\$3.08		1		1.4
Alchemia	ACL	\$71	\$0.37		\$0.63	\$1.32	\$0.00	\$0.00		-\$8.80	-\$13.43				
Acrux	ACR	\$579	\$3.48		\$56.10	\$93.47	\$0.00	\$0.00		\$46.55	\$57.15	23%	Ρ	10	
Acuvax	ACU	\$3	\$0.002		\$0.024	\$0.012	\$0.000	\$0.000		-\$1.841	-\$0.609				
Actinogen	ACW	\$2	\$0.03		\$0.09	\$0.09	\$0.05	\$0.06	21%	-\$0.74	-\$0.74		ł		
Anteo Diagnostics	ADO AGX	\$53 \$10	\$0.07 \$0.01		\$0.62 \$0.22	\$1.02 \$0.05	\$0.08 \$0.01	\$0.01 \$0.00	-86%	-\$2.26 \$2.48	-\$2.22 -\$2.71				
Agenix Allied Health Group	AGA	\$24	\$0.01		\$0.22	\$0.05	\$0.01	\$0.00	63%	\$2.40 -\$0.04	-\$2.71				3.5
Analytica	ALT	\$9	\$0.04		\$0.29	\$0.28	\$0.00	\$0.00	0370	-\$1.29	-\$0.20				5.5
Advanced Surgical	AMT	\$5	\$0.15		\$7.47	\$7.37	\$6.03	\$7.20	19%	-\$0.90	-\$3.27		1		0.7
Antisense Therapeutics	ANP	\$9	\$0.01		\$0.10	\$0.09	\$0.00	\$0.00		-\$3.42	-\$1.81		1		
Leaf Energy	LER	\$3	\$0.10		\$0.00	\$0.09	\$0.00	\$0.00		\$0.91	-\$1.79				
Atos Wellness	ATW	\$3	\$0.02		\$0.01	\$0.35	\$0.00	\$0.00		-\$0.38	-\$1.04		1		
Avita Medical	AVH	\$24	\$0.10		\$3.88	\$4.54	\$2.69	\$3.12	16%	-\$5.89	-\$1.95				7.6
Avexa	AVX	\$39	\$0.05		\$1.70	\$1.66	\$0.00	\$0.00		-\$41.49	-\$5.05				
Austofix	AYX	\$4	\$0.29		\$2.81	\$1.84	\$2.65	\$1.60	-39%	-\$0.34	-\$0.53		ļ		2.4
Bluechiip	BCT	\$12	\$0.15		\$0.26	\$0.73	\$0.00	\$0.00		-\$3.13	-\$3.17		l		
Biodiem	BDM	\$10	\$0.10		\$0.00	\$0.20	\$0.00	\$0.00		-\$3.39	-\$2.62				
Biotron	BIT	\$16	\$0.11		\$0.00	\$0.45	\$0.00	\$0.00		-\$1.87	-\$1.91				
Blackmores	BKL	\$502	\$30.09		\$217.09	\$236.59	\$214.93	\$234.42	9%	\$24.30	\$27.31	12%	Ρ	18	2.1
Benitec	BLT	\$21	\$0.02		\$0.18	\$0.35	\$0.00	\$0.00		-\$4.64	-\$3.54				
Bioniche	BNC	\$71	\$0.70	C\$	\$45.90	\$36.04	\$26.99	\$27.37	1%	-\$1.59	-\$15.34				2.6
Bone Medical	BNE	\$2	\$0.02		\$0.56	\$0.14	\$0.00	\$0.00		-\$3.95	-\$1.52				
Bionomics	BNO	\$159	\$0.46		\$3.88	\$4.14	\$1.63	\$1.56	-4%	-\$8.51	-\$8.43		_		
Brain Resource Corp	BRC	\$22	\$0.24		\$8.14	\$5.65	\$7.71	\$5.53	-28%	\$2.21	\$0.27	-88%	Ρ	82	4.0
Biota	BTA	\$160	\$0.88		\$67.59	\$14.61	\$0.00	\$0.00	050/	\$16.24	-\$28.09				1.0
Cordlife	CBB	\$8	\$0.05		\$2.33	\$4.78	\$2.26	\$4.41	95%	\$2.35	-\$35.19				1.8
Cbio	CBZ	\$31	\$0.22		\$0.23	\$0.21	\$0.00	\$0.00		\$16.79	-\$13.68		-		
Cellmid	CDY CGS	\$7 \$11	\$0.02		\$0.33	\$0.15	\$0.00	\$0.00	4.40/	-\$1.34	-\$2.27		ł		1.2
Cogstate Circadian Technologies	CIR	\$11	\$0.16 \$0.52		\$9.59 \$2.25	\$8.25 \$1.83	\$9.48 \$0.00	\$8.13 \$0.00	-14%	\$1.64 -\$6.95	-\$0.85 -\$10.26				1.3
Compumedics	CMP	\$24 \$14	\$0.09		\$32.61	\$31.27	\$32.37	\$30.86	-5%	\$0.41	\$0.08	-80%	Р	171	0.4
Cryosite	CTE	\$5	\$0.10		\$6.14	\$6.66	\$5.97	\$6.43	8%	\$0.005	\$0.33	7149%	P	14	0.4
Clinuvel Pharmaceuticals	CUV	\$49	\$1.62		\$1.85	\$2.28	\$0.00	\$0.43	0 /0	-\$11.52	-\$11.41	714970	F	14	0.7
CathRx	CXD	\$21	\$0.15		\$0.76	\$0.78	\$0.48	\$0.02	-95%	-\$10.56	-\$8.95				
Calzada	CZD	\$19	\$0.06		\$0.63	\$0.91	\$0.00	\$0.00	0070	-\$2.31	-\$2.94				
Ellex Medical Lasers	ELX	\$9	\$0.11		\$48.74	\$43.52	\$47.41	\$43.11	-9%	\$3.76	-\$0.70		1		0.2
Eastland Medical	EMS	\$8	\$0.02		\$4.02	\$3.14	\$3.93	\$3.00	-24%	-\$4.86	-\$4.51		İ		2.7
Genera Biosystems	GBI	\$9	\$0.13		\$0.65	\$0.82	\$0.04	\$0.06	38%	-\$2.49	-\$2.94		1		
Genetic Technologies	GTG	\$79	\$0.20		\$8.66	\$18.28	\$4.92	\$4.59	-7%	-\$9.34	\$0.91		Р	87	17.2
Helicon Group	HCG	\$12	\$0.02		\$0.00	\$0.00	\$0.00	\$0.00		-\$0.86	-\$1.14				
Holista Colltech	HCT	\$7	\$0.14		\$6.73	\$6.08	\$6.24	\$6.02	-3%	-\$1.57	-\$0.08				1.2
Mayne Pharma Group	MYX	\$66	\$0.44	**	\$36.71	\$50.10	\$34.37	\$45.70	33%	\$3.25	\$1.68	**	Ρ	39	1.4
Healthlinx	HTX	\$3	\$0.02		\$0.05	\$0.05	\$0.01	\$0.01	8%	-\$1.86	-\$2.34		_		$\square$
IDT Australia	IDT	\$16	\$0.38		\$12.24	\$13.10	\$11.83	\$12.77	8%	-\$1.58	-\$0.24		l	L	1.3
Immuron	IMC	\$21	\$0.07		\$0.30	\$0.50	\$0.25	\$0.46	89%	-\$1.90	-\$2.60		l		$\square$
IM Medical	IMI	\$0	\$0.00		\$0.08	\$0.01	\$0.09	\$0.01	-94%	-\$1.69	-\$4.07		-	_	$\square$
Imugene	IMU	\$3	\$0.02		\$0.04	\$2.24	\$0.00	\$0.00	00/	-\$1.54	\$0.42		Р	7	20.0
Impedimed	IPD	\$86	\$0.55		\$3.80	\$4.13	\$3.44	\$3.70	8%	-\$11.40	-\$14.82		-	40	23.2
ITL Kormol Soniy	ITD	\$12 \$10	\$0.09		\$41.35	\$41.12	\$40.86	\$40.71	0%	-\$12.86	\$0.94		Р	13	0.3
KarmelSonix LBT Innovations	KSX LBT	\$19 \$5	\$0.02 \$0.05		\$0.53 \$3.91	\$0.49 \$0.74	\$0.35 \$0.00	\$0.33 \$0.00	-5%	-\$5.94 \$1.49	-\$6.68		ł	<u> </u>	$\vdash$
LBT Innovations	LBT	\$5 \$19	\$0.05		\$3.91 \$1.67	\$0.74 \$2.06	\$0.00	\$0.00 \$0.18	-41%	\$1.49 -\$5.67	-\$1.16 -\$6.80		ł		$\vdash$
Medigard	MGZ	\$19	\$0.08		\$0.29	\$2.06	\$0.30	\$0.10		-\$5.67	-\$0.64		ł	<u> </u>	$\vdash$
Medical Australia	MLA	\$2 \$9	\$0.03		\$7.30	\$8.78	\$7.30	\$8.78	20%	-\$0.40	-\$0.34		ł		1.0
Mesoblast	MSB	\$2,263	\$8.09		\$0.76	\$120.92	\$0.00	\$0.00	2070	-\$1.34	\$90.61		Р	25	
Medical Developments	MVP	\$23	\$0.45		\$8.36	\$10.45	\$8.30	\$10.45	26%	\$0.88	\$1.74	98%	P	13	2.2
Nanosonics	NAN	\$131	\$0.43 \$0.57		\$1.71	\$3.30	\$0.76	\$2.25	194%	-\$8.17	-\$11.21	5070			58.5
NeuroDiscovery	NDL	\$4	\$0.04		\$0.04	\$0.12	\$0.00	\$0.00		-\$1.71	-\$1.46		ł		
Novogen	NRT	\$16	\$0.16		\$1.79	\$2.54	\$0.00	\$0.00		-\$15.25	-\$9.48		1		
NuSep Holdings	NSP	\$8	\$0.11	1	\$5.37	\$4.68	\$2.40	\$1.80	-25%	\$3.29	-\$6.56		1		4.5
OBJ	OBJ	\$22	\$0.02	1	\$0.96	\$0.89	\$0.00	\$0.00		-\$0.95	-\$0.90		1		
Optiscan Imaging	OIL	\$13	\$0.10	1	\$1.24	\$0.55	\$0.97	\$0.51	-47%	-\$1.65	\$0.01		1		25.6
OMI Holdings	OMI	\$2	\$0.00		\$1.64	\$0.10	\$0.79	\$0.00	-100%	-\$0.71	-\$0.60		1		
	PAB	\$16	\$0.07		\$1.53	\$1.07	\$0.00	\$0.00	-	-\$7.54	-\$7.42		1		r

Legend: P - denotes Profitable, June 30, 2011; PE - Price/Earnings Ratio; P/S - Price/Sales Ratio [less than 100]

\*\*Mayne Pharma results for FY2010 included only 8 months revenues, sales and earnings following a merger with Halcgyen Pharmaceuticals.

Cont'd over

### Results Summary June 30 Reporting Companies – FY2011

Company	Code	Cap (\$M)	Price	1	2010	2011	2010	2011	1	2010	2011	[			
			16/09/11		Revenues (\$M)	Revenues (\$M)	Sales (\$M)	Sales (\$M)	%ch.	Profit/Loss (\$M)	Profit/Loss (\$M)	%ch.	Р	PE	P/S
Probiotec	PBP	\$19	\$0.35	1	\$80.51	\$72.37	\$74.77	\$71.77	-4%	\$9.48	-\$10.34		Ì		0.3
Prana Biotechnology	PBT	\$41	\$0.17	1	\$0.22	\$0.16	\$0.00	\$0.00		-\$4.91	-\$6.43		1		
Probiomics	PCC	\$2	\$0.01	1	\$0.85	\$0.94	\$0.75	\$0.94	25%	\$0.08	\$0.00		1		1.9
Progen Pharmaceuticals	PGL	\$13	\$0.21	1	\$2.86	\$3.67	\$1.97	\$2.59	31%	-\$15.84	-\$6.10		1		4.9
Prima Biomed	PRR	\$206	\$0.21	1	\$0.52	\$1.07	\$0.00	\$0.00		-\$17.96	-\$21.08		1		
pSiVida	PVA	\$93	\$4.50	US\$	\$23.05	\$4.97	\$0.00	\$0.00		\$8.75	-\$8.63		1		
Pharmaxis	PXS	\$179	\$0.79	1	\$53.79	\$4.46	\$0.83	\$0.91	10%	-\$46.35	-\$45.76		1		
Phylogica	PYC	\$24	\$0.06		\$0.69	\$2.47	\$0.00	\$0.00		-\$4.57	-\$3.61		1		
QRxPharma	QRX	\$139	\$1.11	1	\$0.47	\$0.93	\$0.00	\$0.00		-\$27.47	-\$25.64		1		
Resonance Health	RHT	\$6	\$0.02	1	\$2.01	\$1.93	\$1.84	\$1.75	-5%	-\$0.10	-\$0.32		1		3.5
Southern Dental	SDI	\$18	\$0.15	1	\$54.04	\$54.98	\$53.09	\$54.85	3%	\$3.47	\$1.21	-65%	Р	15	0.3
Sunshine Heart	SHC	\$47	\$0.05		\$0.47	\$0.53	\$0.00	\$0.00		-\$6.53	-\$11.48				
Solagran	SLA	\$30	\$0.09		\$2.06	\$1.21	\$1.22	\$1.02	-17%	-\$4.55	-\$7.63				29.0
Somnomed	SOM	\$47	\$1.16		\$10.71	\$12.34	\$10.71	\$12.34	15%	\$0.79	\$0.74	-6%	Ρ	63	3.8
Starpharma Holdings	SPL	\$308	\$1.25		\$5.91	\$3.30	\$0.00	\$0.00		-\$6.38	-\$8.93				
Sirtex Medical	SRX	\$278	\$4.99	1	\$72.09	\$72.95	\$64.33	\$70.29	9%	\$16.08	\$11.48	-29%	Р	24	4.0
Tyrian Diagnostics	TDX	\$2	\$0.00	1	\$2.05	\$1.20	\$0.45	\$0.07	-86%	-\$4.16	-\$4.37				
Tissue Therapies	TIS	\$64	\$0.47	1	\$0.38	\$0.43	\$0.00	\$0.00		-\$3.49	-\$5.34		1		
USCOM	UCM	\$8	\$0.16		\$1.02	\$0.88	\$0.84	\$0.84	0%	-\$1.02	-\$2.69				10.0
Unilife Corporation	UNS	\$264	\$0.71	US\$	\$11.42	\$6.65	\$2.54	\$2.77	9%	-\$29.75	-\$40.68				95.2
Virax Holdings	VHL	\$3	\$0.02	1	\$0.33	\$0.79	\$0.00	\$0.00		-\$1.86	-\$1.36		1		
Viralytics	VLA	\$32	\$0.54	1	\$0.06	\$1.66	\$0.00	\$0.00		-\$4.87	-\$4.36		1		

Legend: P - denotes Profitable, June 30, 2011; PE - Price/Earnings Ratio; P/S - Price/Sales Ratio [less than 100] \*\*Mayne Pharma results for FY2010 included only 8 months revenues, sales and earnings following a merger with Halcgyen Pharmaceuticals.

### Method

We have compiled revenue, sales and profit/loss results for 90 ASX listed life science companies that reported their full year results for the financial year ending June 30, 2011.

Companies not included were Reva Medical, Genesis R&D, Universal Biosystems, Phosphagenics, Cyclopham, Sigma Pharmaceuticals, API, Heartware International, Scigen, Neuren Pharmaceuticals, which have different reporting periods, and Clover Corp, which recently moved to a July 31 end of financial year reporting date.

At the time of this report the Asian Centre for Liver Diseases had not reported.

Revenues includes sales and all other income, including interest, grants, licence and royalty payments.

Sales comprises income from sale of products and services.

### Analysis

Of 90 companies, 17 were profitable for the year ending June 30, 2011. Of profitable companies with sales, five companies posted an increase in net profit: Resmed (15%), Cochlear (16%), Medical Developments (98%), Blackmores (12%) and Cryosite (7200%).

Three companies with no history of sales reported profits for the year. They were Acrux, Mesoblast and Imugene.

The largest profit from companies with sales was recorded by CSL (\$941million) followed by Resmed (US\$227 million), Cochlear (\$180 million) and Blackmores (\$27 million).

There were 26 companies which reported an increase in sales, 26 companies reported a decrease, with the balance of 38 companies reporting no sales.

There were 21 companies which reported sales of greater than \$1 million but less the \$10 million. Seven companies reported sales of greater than \$10 million but less than \$50 million. Three companies reported sales of greater than \$50 million but less than \$100 million – Sirtex Medical, Southern Dental and Probiotec.

### **Price/Sales Analysis**

One financial ratio that can be used to analyse companies with sales but no or low profits is that of the price-to-sales ratio.

One rule of thumb is that high growth companies with sales but no profits can trade on multiple of 4 - 5 times sales.

For mature companies with low growth in sales, a sales multiple of 1 times is often considered as a benchmark measure of performance.

In the table above, five companies with sales of greater than \$30 million (Compumedics, Southern Dental, ITL, Probiotec and Ellex Medical Lasers) are trading on price/sales ratios of less than 0.5, indicating that these companies are expected to struggle to grow sales.

Several companies with very high price/sales ratios include Genetic technologies (17.2) and Impedimed (23.2), both of which operate in the field of diagnostics.

**Bioshares** 

Bioshares Model Portfo	olio (16 Septe	ember 2011)			
Company	Price	Date added			
	(current)	to portfolio			
Mayne Pharma Group	\$0.435	\$0.435	September 2011		
Genetic Technologies	\$0.20	\$0.18	August 2011		
Acrux	\$3.48	\$3.37	June 2011		
Psivida	\$4.50	\$3.95	May 2011		
Bioniche	\$0.70	\$1.35	March 2011		
Somnomed	\$1.16	\$0.94	January 2011		
Phylogica	\$0.058	\$0.053	September 2010		
Sunshine Heart	\$0.046	\$0.036	June 2010		
Biota Holdings	\$0.88	\$1.09	May 2010		
Tissue Therapies	\$0.47	\$0.21	January 2010		
Atcor Medical	\$0.08	\$0.10	October 2008		
Impedimed	\$0.55	\$0.70	August 2008		
Bionomics	\$0.46	\$0.42	December 2007		
Cogstate	\$0.16	\$0.13	November 2007		
Sirtex Medical	\$4.99	\$3.90	October 2007		
Clinuvel Pharmaceuticals	\$1.62	\$6.60	September 2007		
Pharmaxis	\$0.79	\$3.15	August 2007		
Universal Biosensors	\$1.00	\$1.23	June 2007		
Alchemia	\$0.37	\$0.67	May 2004		

### Portfolio Changes – 16 September 2011

### IN:

Mayne Pharma Group has been added in at 43.5 cents. See analysis on page 1.

### OUT:

No changes

## Interesting Positioning for pSivida

pSivida (PVA: \$4.50) has announced that new trials for the treatment of posterior uveitis will commence. pSivida has already developed a treatment for this condition, called Retisert and now **soldby Bausch & Lomb**. What is interesting about this trial is that it will use the same delivery system and active pharmaceutical ingredient as its product Iluvien that has been partnered with **Alimera Sciences** and is currently under assessment with the FDA.

Iluvien has been filed for approval with the FDA for the treatment of diabetic macular odema. This is a market 30 times bigger than for the treatment of posterior uveitis. The Retisert product has a limited market because it has to be surgically implanted. Iluvien has shown to be effective for three years, being injected into the eye during a doctor's office visit.

The active pharmaceutical in Retisert, Iluvien, and in the planned new product for pSivida for posterior uveitis, is the corticosteroid fluocinalone acetonide.

An investigator-sponsored Phase I/II trial will be conducted with a smaller device using a smaller gauge needle to deliver the implant, which would have product advantages to Iluvien. If that trial is successful, pSivida will move on to a Phase III trial.

### **Issue for Alimera**

The problem for pSivida's partner, Alimera Sciences, is that the data for Iluvien is co-owned by both companies. This means that Psivida can reference the NDA data for Iluvien for its own product in development for posterior uveitis which it owns outright, offering a faster and simpler path to market. pSivida has rights to a 20% profit share arrangement to Iluvien.

The issue for Alimera is that if pSivida introduces its own product that is identical to Iluvien for the treatment of posterior uveitis, there is the potential for some off-label use of the Psivida product, particularly if the Psivida product is sold at a significant discount.

It would appear that Alimera may need to better secure its lead product Iluvien, and this could lead to a re-negotiation of commercial rights to Iluvien, with potentially improved deal terms for pSivida.

Bioshares recommendation: Speculative Buy Class B

**Bioshares** 

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any       CMP is 10% < Fail Value	by       CMT B 200% F nm Value       Specialative Buy - Class C         commutate       CMP is 10% - Fair Value       These stocks generally have one product in development and lack many external validation features.         bill       CMP-Current Market Price)       Self         CM	tocks with existows.		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
Speculative Hold – Class A or B or C Sell       Speculative Hold – Class A or B or C Sell         COMP-Current Market Price)       Sell         Corporate Subscribbers: Pharmaxis, Starpharma Holdings, Cogstate, Bionomics, Circadian Technologies, Biota Holdings, mpedimed, QRxPharma, Patrys, LBT Innovations, Hexima, Mesoblast, Atcor Medical, Tissue Therapies, Viralytics, Phosphagenics mmuron, Phylogica, Bluechiip, pSivida, Antisense Therapeutics, Benitec, Allied Healthcare Group         Distinct       Infomation contained in this newdeter is not a complete analysis of every material fact respecting any company, industry or security. The opinions and estimates been in expressed represent the current judgement of the publisher and are subject to change. Nake Industry and Market Analysis PJ Ldt (BIMA) and on thave regard on any person's or company is investment dijectives, financial simulation and particular needs. Accordingly, no nexipients about feely on any recommendation (whether express or implied contained in this document whole the sensistic and are basis they an only fit the particular particular media during and particular insets accurate the target and provide and resonance accompare and provide in or repositive and the set hasis of the particular and provide in the previous and particular insets accurate analytic and price on staffing in societ's valued at less that information herein sa accurate blue thesis they are only fit the particular particular and the information. Fitch IBI: These interests can change at any time and water the associates, 2004, PTA, CEA, CON, NPTA, CEA, CON, MPTA, C	CMP is 20% > Fair Value     Speculative Hold - Class A or B or C     Sell     Sell     CMP-current Market Price)     Sell     Sell     Comported Subscribers: Pharmaxis, Starpharma Holdings, Cogstate, Bionomics, Circadian Technologies, Biota Holdings, mpedimed, QRxPharma, Patys, LBT Innovations, Hexima, Mesoblast, Atcor Medical, Tissue Therapies, Viralytics, Phosphagenics mmuron, Phylogica, Bluechip, pSivida, Antisense Therapeutics, Benitec, Allied Healthcare Group Doclaime:     Information consider in this needestre is not a complete analysis of every material fact respecting any company, industry or security. The opinions and estimates beenin expressed present the current judgement of the publisher and are subject to change. Blate Industry and Market Analysis Py Lul (BIMA) and yor their associates, Officers or staff may have interests is securities. Financial situation and particular needs. Accordingly, no respines should rely on any commendiation (whether express or implied) contained in this becoment whose consulting their investment adviser (Compontions Law salfs). The peross involved in or responsible for the paraticular methy and Market Analysis Py Lul. The or company's investment objectives, financial situation and particular needs. Accordingly, no respines should rely on any recommendations. How any peroxis to account whose the base is device and biometic Market Analysis Py Lut. The or company's investment objectives, financial situation and particular needs. Accordingly, no respines about the yor any commendations. How any peroxis commend whet methy sets associal the basis device and biometic Market Analysis and the transpines or company in whose the set methy and basis (the paratolian and particular needs are advised to responsible for the paratolian and particular needs. Acc, ACR, AVD, ND, NTA, CSS, COU, CS, COV, MYA, HCG DF, ML, PAN, PBP, PSS, PYC, SHC, SM, SHT, TS, UBI. These merestres on change any tome and activational resonanesolutions. Holding is nockevised at less the 100 are not disclose	ccumulate lold	CMP is 10% < Fair Value Value = CMP	These stocks generally have one product in development and lack
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