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Bioshares

4 April 2014
Edition 546

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

Quarterly Review

Bioshares Index Steady in March Quarter

The **Bioshares Index** held steady in the March quarter 2014, with a 0.5% gain masking strong gains made by stocks such as Progen Pharmaceuticals (up 346%), Benitec Biopharma (up 118%) and USCOM (up 114%), offsetting falls by Reva Medical (down 69%), Scigen (down 55%), Isona (down 40%), Bluechiip (down 35%), Acrux (down 33%) and Bionomics (down 30%).

It should be noted that the Bioshares Index figure for March 31, 2014 is based on Prana Biotech's price from when it was in a trading halt on March 31 of \$1.04. The following day its price closed down 73.5% to \$0.275, following the release of Phase II trial results which showed that its metal chelating compound PBT2 did not reach its primary endpoint in the trial.

Bionomics' shares fell because it missed its primary endpoint in a Phase II renal cancer study. Reva Medical announced that it would end development of its ReZolve bioresorbable stent scaffold and focus on a new stent design. Acrux's share price has been hit by concerns that the testosterone market will be more stringently controlled once the FDA completes a review of the cardiovascular related risks of testosterone therapy. The review stems from claims made in two retrospective studies that testosterone increases the risk of cardiovascular events. Retrospective studies, however, are not relied upon generally in setting therapeutic recommendations because of the many ways in which the data can be biased and skewed. As a consequence of what may be seen as an over-reaction, Acrux has emerged as a very attractive buying proposition.

An easing in the **Nasdaq Biotech Index** is now at work, with growth slowing to 4.2% for the quarter, compared to 8.3% for the previous quarter and well down from 16.7% increased recorded for the same quarter a year ago.

The **Bioshares Large Cap Index** registered a 1.8% decline for the quarter, its first decline after nine solid quarters of growth. CSL held steady with a 1% increase for the quarter, while Cochlear dipped 3% and Resmed fell 10%. Shares in Sigma Pharmaceuticals rose 2% in the March quarter.

Of note for the March quarter was the performance of three recent IPOs, with December quarter IPOs Dorsavi and Innate Immunotherapeutics up 29% and 28% respectively from

Index Performance by Quarter

Cont'd over

	Q1 2013	Q2 2013	Q3 2014	Q4 2013	Q1 2014
Bioshares Index	-0.1%	-3.0%	17.4%	1.6%	0.5%
Nasdaq Biotech Index	16.7%	8.6%	20.7%	8.3%	4.2%
Bioshares Large Cap Index	6.9%	4.4%	4.3%	4.4%	-1.8%
ASX 300 Index	6.7%	-3.6%	8.7%	2.5%	0.2%

Companies covered: Quarterly Review

	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 - Current)	48.7%
Cumulative Gain	430%
Av. annual gain (13 yrs)	19.0%

Bioshares is published by Blake Industry & Market Analysis Pty Ltd.

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Individual Subscriptions (48 issues/year)
\$400 (Inc.GST)

Edition Number 546 (4 April 2014)

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their closing prices at the end of 2014. Simavita, which listed during the March quarter, was up 95% from its offer price.

Capital Raisings

As mentioned, a sole IPO took place during the March quarter, that of Simavita, which is also listed on the Toronto Stock Exchange. Simavita merged with GTec International Resources, which was formerly a 100% owned Canadian subsidiary of Genetic Technologies. Through its Australian prospectus, Simavita raised \$1.1 million, following earlier rounds from which it raised a gross \$13.8 million.

A total of \$98 million was raised in the March Quarter, including the \$1.1 million by Simavita. This figure is 40% less than \$158 million raised in the December quarter, 2013.

However, two capital raisings stood out: Viralytics raised \$27 million to further development of CAVATAK, an oncolytic virotherapy; and Benitec received \$15.75 million from its \$31 million raising, with the balance (\$15.75 million) to follow approval at a shareholder's meeting later this month. The Benitec placement was conducted at \$1.07 a share, with the stock closing the quarter at \$1.62.

The feature common to both raisings was the introduction of specialist life science investors, including numbers of well known North American life science investors, to the respective share registers. With the registers of both companies essentially containing no life science institutional investors prior, the pronounced change in register composition marks out both capital raisings as transformational.

Leading Companies Reported Strong Sales Growth

A number of companies have reported very strong growth in sales in the December or March quarters. This week Sirtex Medical announced that unit sales had increased by 18% in the March quarter over the previous corresponding period, led by sales in the US which were up 25.8%. Somnomed announced a sales increase of 41% in the December quarter (March results have not been released), which was assisted by a lower Australian dollar. Unit sales of the company's Somnodent oral appliances were up 23.4% for the quarter over the previous corresponding period. Nanosonics reported a sales increase of 119% for the December half, up to \$9.7 million.

In contrast, sales of Pharmaxis's Bronchitol product for the treatment of cystic fibrosis in Europe and Australia have been disappointing, after six quarters of sales.

Positive Clinical and Regulatory News

Positive clinical news during the quarter included Mesoblast's reporting of Phase II data from a 100 patient study with its allogeneic stem cells for the treatment of intervertebral disc repair. Mesoblast now intends to move into Phase III studies with the program, after having raised \$170 million last year for this purpose and other product opportunities.

The news wasn't all bad for Prana, which announced some encouraging data from its Phase II Huntington's disease trial with PBT2 and plans to conduct further trials in that indication.

Benitec Biopharma announced it had received approval from the FDA to commence its Phase I/II trial in patients with HCV and that it has also commenced screening patients for the trial.

Biotron announced antiviral activity at six months in eight patients with HIV Genotype 3 infection, from its Phase II trial of BIT225.

Starpharma revealed that its Vivagel-coated condom product gaining regulatory approval in Japan.

Outlook

Positive Clinical and Commercial Outcomes Required Over Next 6 months

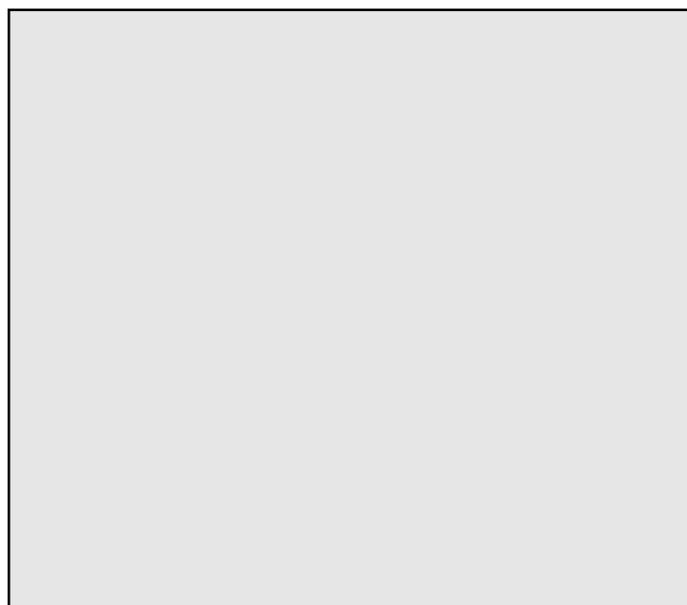
Following a number of negative outcomes for some companies in the sector in the first quarter, there needs to be a swing in favour clinical and regulatory success if the positive sentiment towards the sector observed in 2013 is to be maintained in 2014.

Key clinical and commercial developments in the next six months that should sustain interest include:

- FDA approval of MoxDuo IR for QRxPharma (May 25)
- Positive clinical results in Alchemia's Phase III oncology trial
- Commencement of dosing in Benitec Phase I/ II study (HCV)
- Neuren Pharmaceuticals completes enrollment in Phase II Rett Syndrome trial
- Viralytics initiates Phase II randomised cancer study
- Completion of recruitment for Innate Immunotherapeutics Phase II trial
- Approval for Tissue Therapies wound healing product in Europe
- Launch of Universal Biosensors second diagnostic product, with Siemens, in Europe
- Launch of Analytica's PeriCoach device

A continued strong performance from leading revenue generating businesses will also help sustain confidence in the sector.

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Capital Raisings by Australian-listed Biotech Companies Q1 2014

Company	Investment Manager or Investor	Type of Raising	Funds Raised (\$M)
Viralytics	Bell Potter (Lead Manager), Roth Capital Partners (Sole US Agent)	Placement	\$27.10
Mayne Pharma		Placement (Bookbuild)	\$18.00
Benitec Biopharma	RA Capital, Perceptive Advisors, Special Situations Funds, Sabby Management	Placement - Stage I (of \$31 M)	\$15.75
Impedimed	Canaccord Genuity	Placement	\$8.80
pSivida	RA Capital	Placement	\$7.8
Phylogica	Paterson's Securities	Rights Issue	\$6.10
Invion	Paterson's Securities, Morgans Corporate (Joint Leads)	Placement	\$5.00
Invion	Paterson's Securities, Morgans Corporate (Joint Leads)	Rights Issue	\$0.89
Bone Medical	Cornerstone Corporate	Placement	\$3.0
Immuron	Paterson's Securities	Rights Issue (\$9.66 M u/w)	\$1.80
Patrys	Azure Capital	Rights Issue Shortfall	\$1.28
Patrys	Azure Capital	Rights Issue Shortfall	\$0.93
Nusep		Placement	\$0.45
		IPOs (Simavita - \$1.1 M)	\$1.1
Total raised in Q1 2014			\$98.0
Total - 2014 (CY to date)			\$98.0

Bioshares Model Portfolio (4 April 2014)				Portfolio Changes – 4 April 2014
Company	Price (current)	Price added to portfolio	Date added	
Invision	\$0.074	\$0.089	February 14	IN: No changes Recommendations: OUT: No changes Recommendations:
QRxPharma	\$0.760	\$0.620	December 13	
Impedimed	\$0.217	\$0.245	December 13	
Analytica	\$0.029	\$0.025	December 13	
Imugene	\$0.011	\$0.022	November 13	
Oncosil Medical	\$0.125	\$0.155	September 13	
IDT Australia	\$0.310	\$0.260	August 13	
Viralytics	\$0.325	\$0.300	August 13	
Tissue Therapies	\$0.320	\$0.255	March 2013	
Somnomed	\$1.43	\$0.94	January 2011	
Cogstate	\$0.315	\$0.13	November 2007	
Universal Biosensors	\$0.30	\$1.23	June 2007	

Selected Clinical Trial Developments - Q1 2014

Company	Code	Product/Therapeutic	Event
Antisense Therapeutics	ANP	ATL1103 (acromegaly)	Completed recruitment in Phase II 24 pt trial
Antisense Therapeutics	ANP	ATL1102 (stem cell mobilisation)	Commenced dosing in Phase I trial in 10 healthy volunteers
Biotron	BIT	BIT225 (HCV and HIV)	Announced additional interim Phase II data - all HCV genotype 3 pts were virus free at 24 weeks
Benitec Biopharma	BLT	TT-035 (HCV)	Initiated screening in Phase I/II trial in HCV subjects
Bionomics	BNO	BNC105(metastatic renal cell cancer)	Phase II trial in 139 patients did not meet primary endpoint
Clinuvel Pharm.	CUV	Scenesse(afamelanotide 16mg implant)	Announced physician led study in Hailey-Hailey disease (familial benign chronic pemphigus); 10 pts, one year, six month follow up
Invision	IVX	IVX102 (nadalol)	FDA hold on Phase II trial lifted; trial to enroll 136 pts with chronic bronchitis enrolled in a validated smoking cessation program
Mesoblast	MSB	Allogeneic MPCs (Intervertebral Disc Repair)	Reported significant reduction in back pain compared HA carrier alone, reduced opioid use, reduced need for additional interventions; to commence Phase III trial
Optiscan Imaging	OIL	Endomicroscopy platform	Commenced study of second generation endomicroscopy platform in the gastroenterology field, St Vincent's Hospital, Sydney
Osprey Medical	OSP	AVERT (dye reduction system)	Enrolled first subject in 700 pt IDE study; seeking claim expansion to include "reduction in Contrast Induced Nephropathy"
Patrys	PAB	PAT-SM6 (Multiple myeloma)	Announced final results of Phase I/IIa trial in 12 pts; 4/12 pts showed evidence of stable disease; primary endpoint of safety was met; no MTD was reached
Prana Biotech	PBT	PBT2 (Alzheimer's disease)	Did not meet primary endpoint of reduction in beta-amyloid plaques in the brains of prodromal mild AD pts
Prana Biotech	PBT	PBT2 (Huntington's disease)	Achieved mixed results in Phase II trial; met safety and tolerability endpoint
Viralytics	VLA	CAVATAK (oncolytic virotherapy)	Commenced Phase I/II study; IV delivery in 30 late stage melanoma, prostate, lung or bladder cancer

The Australian Listed Life Sciences Sector

March 31, 2014 : Capitalisation \$53.8 billion, 94 companies

Bioshares Large Cap. Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
CSL	CSL	33,613	Manufactures pharmaceutical products including vaccines and human plasma fractions	1%	18%	\$69.73
Resmed Inc.	RMD	6,740	Manufactures diagnostic and treatment equipment for sleeping disordered breathing	-10%	9%	\$4.76
Cochlear	COH	3,257	Manufactures cochlear hearing implants	-3%	-16%	\$57.07
Sigma Pharmaceuticals	SIP	745	Pharmaceutical manufacturing and wholesaling	2%	-10%	\$0.67
Capitalisation Total		44,354				

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Mesoblast	MSB	1,751	Developing therapies based on mesenchymal pre-cursor stem cells, with applications in cartilage regrowth and heart and bone repair. Acquired assets from Osiris Therap.	-7%	-11%	\$5.450
Sirtex Medical	SRX	871	The company's core technology uses radioactive particles to irradiate tumours in the liver. Approved for use in most major regions.	32%	40%	\$15.530
Mayne Pharma Group	MYX	557	Manufactures, develops and markets generic drugs, with operations in Australia and the USA	28%	98%	\$0.950
Unilife Corporation	UNS	458	Developer of retractable syringes	-7%	113%	\$0.745
Prana Biotechnology	PBT	447	Developing drugs to treat CNS diseases such as Alzheimer's and Parkinson's	35%	384%	\$1.040
Blackmores	BKL	442	Manufactures vitamin, mineral and herbal supplements and skin & hair products in Australia and N.Z.	24%	-15%	\$25.930
Acrux	ACR	286	Developer of the transdermal drug products Axiron, Evamist/Ellavie and Recuvyra.	-33%	-56%	\$1.720
API	API	276	Pharmaceutical wholesaler	-6%	28%	\$0.565
GI Dynamics	GID	228	Commercialising the Endobarrier, an implantable polymer liner for the management of obesity and diabetes	-24%	-11%	\$0.570
Nanosonics	NAN	227	Developing a novel disinfection technology, the first product is a point of care ultrasound probe disinfection unit	2%	79%	\$0.860
Bionomics	BNO	221	Developing drugs to treat cancer and CNS diseases, and has also developed a gene diagnostic for epilepsy.	-30%	39%	\$0.530
Starpharma Holdings	SPL	218	Developer of pharmaceutical applications of chemical scaffolds known as 'dendrimers'	-12%	-29%	\$0.765

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Anteo Diagnostics	ADO	203	Developer of a biological coatings technology that can be applied to immunoassays, bio-separations, drug delivery and other medical devices	53%	322%	\$0.245
Admedus	AHZ	176	Diversified medical products group. Investor in Coridon, a vaccine technology company.	-10%	383%	\$0.140
Alchemia	ACL	172	Biopharmaceutical company with a revenue generating product, generic fondaparinux. Lead product HA-Irinotecan in a pivotal Phase III trial for colorectal cancer.	-7%	61%	\$0.530
Benitec Biopharma	BLT	162	R&D company focusing on gene silencing, specifically DNA delivered RNAi technology	182%	398%	\$1.620
Neuren Pharmaceuticals	NEU	136	Developing neuroprotective therapeutics	-23%	159%	\$0.088
QRxPharma	QRX	126	Developing a 'dual opioid' drug (MoxDuo) to treat moderate to severe pain	3%	-34%	\$0.770
pSiVida	PVA	118	Developing drug delivery technologies, with a special focus on ophthalmic applications	-5%	95%	\$4.320
Vita Life Sciences	VSC	101	Development, manufacture and distribution of prescription and OTC medicines as well as complementary and alternative medicines, dietary supplements and health foods	12%	27%	\$1.775
Phosphagenics	POH	96	Commercialising a platform technology (alpha-tocopherol) that improves the delivery of pharmaceutical and other products across the skin	-18%	-28%	\$0.094
Tissue Therapies	TIS	92	Developing the VitroGro product for ulcer and wound healing	15%	119%	\$0.350
Regeneus	RGS	81	Commercialisation of autologous adipose derived stem cells and factors. Markets HiQCell for human use and CryoShot for veterinary use.	-4%	0%	\$0.440
Medical Developments	MMP	80	Commercialising the Pentrox inhaler for temporary pain relief. Used widely in ambulances across Australia.	21%	-24%	\$1.400
Osprey Medical	OSP	74	Developing the AVERT system to limit the incidence of contrast induced nephropathy	-12%	20%	\$0.600
OBJ	OBJ	73	Developing transdermal drug delivery technologies	55%	292%	\$0.051
Clovercorp	CLV	73	Development and production of omega-3 food additives from tuna oil	-15%	-29%	\$0.440
Somnomed	SOM	69	Markets oral devices for the treatment of sleep apnea and snoring.	41%	61%	\$1.550
SDI	SDI	67	Manufacture & distribution of amalgam (fillings) & other dental materials and product R&D	-23%	38%	\$0.565
Dorsavi	DVL	65	Commercialising a wireless sensor movement monitoring system and products for use in the Elite Sports, OH&S and medical/physiotherapy markets	29%		\$0.540

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Progen Pharmaceuticals	PGL	62	A developer of cancer therapeutics, including PI-88 and PG545	346%	346%	\$1.115
Clinuvel Pharmaceuticals	CUV	61	Developing an analogue of the alpha-MSH protein, named Scenesse, as a photo-protective agent	67%	-34%	\$1.590
Universal Biosensors	UBI	60	Development, manufacture and commercialisation of a range of in vitro diagnostic tests for point-of-care use	-26%	-51%	\$0.340
Viralytics	VLA	58	Developing a cancer treatment based on the application of viruses (oncolytic virus technology)	3%	5%	\$0.315
SUDA	SUD	57	Developing the anti-malarial product ArTiMist. Acquired drug delivery technology and suite of products in development from Novodel	-21%	94%	\$0.062
Calzada	CZD	54	Holds a 100 % stake in PolyNovo, a polymer chemistry company.	65%	160%	\$0.130
Isona	ISN	53	Respiratory and pulmonary devices company. Recently launched Airsona, an ehealth product.	-40%	150%	\$0.200
Reva Medical	RVA	50	Developing a bioresorbable coronary stent	-69%	-73%	\$0.150
Prima Biomed	PRR	49	Developing the CVac immunotherapy.	3%	-58%	\$0.040
Simavita	SVA	47	Commercialising an instrumented incontinence assessment device	95%	0%	\$0.800
Innate Immuno-therapeutics	IIL	43	Developing MIS416 to treat secondary progressive multiple sclerosis	25%		\$0.250
Impedimed	IPD	41	Markets products that aid the diagnosis of secondary lymphoedema, muscle wasting and other disorders	-8%	156%	\$0.225
Invion	IVX	41	Evaluating Xtoll biologic for lupus and developing the drugs Nadalol and Zafirlukast for respiratory conditions	-11%	67%	\$0.075
Avita Medical	AVH	39	Markets ReCell, a skin repair product	-11%	4%	\$0.120
Ellex Medical Lasers	ELX	36	Develops, manufactures and markets solid state ophthalmic lasers used to treat secondary cataracts and retinal disorders.	-7%	76%	\$0.335
Oncosil Medical	OSL	35	Developing Oncosil, a brachytherapy for pancreatic cancer.	0%	242%	\$0.130
Genetic Technologies	GTG	34	Provides DNA paternity testing services and holds broad patents relating to the use of non-coding DNA.	-4%	-29%	\$0.053
Probiotec	PBP	33	Manufacturer, marketer and distributor of a range of over the counter (OTC) pharmaceuticals, complementary medicines and speciality ingredients	50%	85%	\$0.630

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Antisense Therapeutics	ANP	33	Developing antisense compounds to treat multiple sclerosis and acromegaly	53%	130%	\$0.230
Novogen	NRT	30	Acquired Triaxial Pharmaceuticals in 2012. Now developing 'super' benzopyrans for the treatment of cancer.	-10%	0%	\$0.180
Patrys	PAB	30	Developing human antibody therapies for the treatment of lung, pancreatic, gastric and colon cancers	-17%	39%	\$0.043
Cogstate	CGS	30	Marketing cognitive performance diagnostic products	-17%	-23%	\$0.300
Pharmaxis	PXS	29	Markets the lung function test, Aridol. Bronchitol is approved in Europe for the management of cystic fibrosis	-10%	-71%	\$0.095
Living Cell Technologies	LCT	29	Developing cell therapies for diabetes, Parkinson's disease and Huntington's disease	3%	67%	\$0.080
Medical Australia	MLA	28	Manufacture and supply of medical devices and equipment. Has acquired Medivet, an animal stem cell company	10%	200%	\$0.270
Brain Resource Corp	BRC	25	Development and commercialisation of functional brain analysis techniques	0%	-4%	\$0.250
Cryosite	CTE	23	Provides specialised storage services, especially for umbilical cord blood	8%	-7%	\$0.495
USCOM	UCM	23	Marketing a non-invasive heart output function monitor. Recently acquired Pulsecor, which has developed a non-invasive central blood pressure product	114%	50%	\$0.300
IDT Australia	IDT	23	Manufacturer of pharmaceutical ingredients to international standards for major pharmaceutical groups.	-20%	22%	\$0.300
Resonance Health	RHT	22	Marketing the FerriScan technology, a non-invasive tool for measuring liver iron levels	-3%	307%	\$0.061
ITL	ITD	21	Develops and distributes medical devices such as safety equipment to prevent needle stick injuries and sterile preparation kits.	-14%	4%	\$0.250
Cellmid	CDY	21	Developing therapies that target the midkine protein. Recently launched a range of hair loss products.	-3%	-18%	\$0.028
Analytica	ALT	19	A medical devices company developing the Pericoach product to aid in the management of female urinary incontinence	4%	27%	\$0.028
Atcor Medical	ACG	19	Markets the SphygmoCor device, a noninvasive technology that provides information regarding the functioning of the cardiovascular system	-29%	29%	\$0.120
PharmAust	PAA	19	Manages Epichem, a drug discovery business. Also developing an veterinary anti-parasitic compound (PPL-1) as a human and animal cancer therapy	18%	-7%	\$0.013

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Avexa	AVX	19	Developing an HIV drug, apricitabine. Has invested in a US coal company.	67%	18%	\$0.020
Cynata Therapeutics	CYP	18	Stell cell technology company aiming to produce unlimited uniform, pharmaceutical grade MSCs from a single donor.	-18%	0%	\$0.410
Compumedics	CMP	18	Develops, manufactures and markets sleep diagnostic and monitoring equipment.	28%	96%	\$0.110
Asian American Medical Group	AJJ	18	Manages liver treatment centres in Asia	-19%	-41%	\$0.085
Biotron	BIT	16	Developing compounds to treat HCV and HIV	38%	-9%	\$0.105
Immuron	IMC	15	Sales and development of hyper-immune bovine colostrum products for therapeutic use	-11%	33%	\$0.008
Phylogica	PYC	15	Developing peptide compound libraries for use in human therapeutics	47%	9%	\$0.025
Scigen	SIE	14	Developer and manufacturer of biopharmaceuticals. Company is based in Singapore and was spun out of Sonic Healthcare in 2002.	-55%	-38%	\$0.025
Rhinomed	RNO	13	Developing nasal technologies with applications for sport performance, sleep and drug delivery	-27%	-6%	\$0.033
Cyclopharm	CYC	12	A nuclear medicine company that markets the Technegas lung imaging system	-16%	75%	\$0.210
Circadian Technologies	CIR	11	Developing drugs, including antibodies, around the VEGF C and VEGF D targets	10%	-17%	\$0.225
Holista Colltech	HCT	10	Extracts collagen from sheepskins and markets natural healthcare products.	-26%	14%	\$0.074
Genera Biosystems	GBI	10	Develops, manufactures and distributes advanced molecular diagnostic tests, with a particular focus on women's health.	-17%	26%	\$0.120
NuSep Holdings	NSP	10	Manufacture and sale of protein separations technologies	-19%	-8%	\$0.060
Imugene	IMU	9	Developing a Her2 positive cancer vaccine technology, obtained through the acquisition of Biolife, also developing a buccal drug delivery technology	-18%	56%	\$0.014
Actinogen	ACW	9.1	Diversified biotechnology company. Collaborating with Leaf Energy on bioethanols project and with Curtin University on cancer stem cells.	2%	7%	\$0.045
LBT Innovations	LBT	9	Developed the MicroStreak technology for the automation of microbiology laboratory processing. Now developing an Automated Plate Assesment System (APAS)	15%	91%	\$0.090
Optiscan Imaging	OIL	8	Manufactures confocal microscopes for clinical diagnosis	-7%	-47%	\$0.050

Bioshares Index

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Bluechiip	BCT	7	Development, manufacture and commercialisation of a tracking system for biological samples	-35%	-68%	\$0.060
Bone Medical	BNE	6	Developing treatments for bone and joint degenerative diseases such as arthritis and osteoporosis. Completed 50:1 share consolidation	-76%	-76%	\$0.024
Agenix	AGX	2	Seeking to outlicenseThromboview, an imaging agent. Acquired TB diagnostic assets from Tyrian Diagnostics.	-6%	-97%	\$0.017
Advanced Surgical Design & Manufacture	AMT	2	A developer and manufacturer of prosthetic implants and medical devices	-10%	-57%	\$0.045
Medigard	MGZ	2	Developed retractable syringe technology and other safety medical products.	-29%	33%	\$0.020
Bioxyne	BXN	1.5	Sale and distribution of probiotics.	-20%	-47%	\$0.008

Capitalisation Total 9,480

Listed Biotech Investment Funds or Companies

Company	Code	Cap. \$m	Principal Activities	Change - Quarter	Change - Year	Price 31/03/14
Biotech Capital	BTC	2	The entity is engaged in the orderly sale of assets.	14%	-26%	\$0.025

Capitalisation Total 2

Capitalisation Total - All Indices 53,836

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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